



## COUNTY OF ORANGE HEALTH CARE AGENCY

### MARK B. HORTON, MD, MSPH DIRECTOR OF PUBLIC HEALTH/ HEALTH OFFICER

MAILING ADDRESS: 515 N. SYCAMORE SANTA ANA, CA 92701

TELEPHONE: (714) 834-3155 FAX: (714) 834-5506 E-Mail: mhorton@hca.co.orange.ca.us

#### **PUBLIC HEALTH**

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Dear Colleague,

We are pleased to share this "County of Orange Communicable Disease Summary 1998" with you. The data in this report provide a panoramic view of the status of reportable communicable diseases in the County. Of particular note are the following observations.

Routine childhood immunizations continue to provide effective protection against many dangerous diseases. Diphtheria, measles, polio, rubella, congenital rubella syndrome and tetanus are rare, and, in part as a result of the success of vaccination programs, some of these diseases are nearing elimination. *Haemophilus influenzae* Type B infections, formerly the leading cause of meningitis among young children, have declined dramatically as a result of vaccination programs.

Chlamydia infection is the most common reportable disease in Orange County, California and the United States. It is most common among adolescents aged 15-19 and young adults aged 20-24 years. The rate of reported chlamydia infection has fluctuated since reporting began in California in March 1989. An increase in reported cases in 1998 is at least in part a result of the availability of new, more sensitive laboratory tests. These tests can be used on urine and are therefore more acceptable to men and can be used in screening situations.

The dramatic drop in AIDS cases from 1995 leveled off in 1998; however, the estimated number of persons living with HIV infection continues to increase.

Although still at historically low levels, both gonorrhea and early syphilis increased from 1997 to 1998.

The rate of tuberculosis (TB) in O.C. peaked in 1993 at 16.9/100,000. In 1998 the rate was 10.8—a 36% decline since 1993. The national plan to eliminate TB will require that the large group of latently infected individuals receive prophylaxis.

Hepatitis C virus infection became reportable in California in February 1996. Reports of chronic infections have increased each year, reflecting the pool of previously untested and or unreported infections.

Reports of the notifiable gastrointestinal diseases have declined steeply since 1995 (percent decline in rates: 39% for campylobacteriosis, 35% for giardiasis, 51% for hepatitis A, 52% for salmonellosis, and 58% for shigellosis). Whether these are artifactual (a result of decreased testing) rather than real is unknown and difficult to determine.

1998 was an epidemic year for aseptic (viral) meningitis with 586 cases reported (rate of 21.1/100,000). Echo 30, an enterovirus, predominated.

We hope you find this report interesting and valuable. Questions regarding this report should be directed to Communicable Disease Control and Epidemiology at (714) 834-8180.

Sincerely,

Mark B. Horton, MD, MSPH

Director of Public Health/Health Officer

#### **Acknowledgements**

Prepared By
Communicable Disease Control and Epidemiology

Hildy Meyers, MD, MPH Medical Director

Michael Carson, MS Senior Epidemiologist

#### Data Compiled By

Kathy Higgins, MPH Epidemiologist Pulmonary Disease Services

Susan Olson, MPH Epidemiologist Communicable Disease Control and Epidemiology

Mary Young Staff Assistant Pulmonary Disease Services

#### Narrative Contributed By

Marina Ball, MD STD Controller Special Disease Services

Kathy Higgins, MPH

Roberta Maxwell, PhD Program Manager Pulmonary Disease Services

#### Reviewed By

Kathy Higgins, MPH Roberta Maxwell, PhD

Gerald Wagner, MD Public Health Consultant

Penny Weismuller, DrPH Manager Disease Control

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#### Introduction

The County of Orange Communicable Disease Summary 1998 is a compilation of 1998 communicable disease (morbidity) data for County of Orange residents. Review of morbidity records is a primary means for monitoring and evaluating the health status of County residents. Comparison of local rates to state and national rates as well as the examination of the five-year trends in these data provide a general overview of community health.

The *Summary* includes communicable diseases or conditions with 5 or more reported cases in 1998. Additionally, vaccine-preventable diseases with less than 5 cases in 1998 are reviewed. Finally, the list of reportable diseases and the Confidential Morbidity Report form are provided as a reference.

The communicable diseases or conditions data are based on reports submitted under Title 17, California Code of Regulations (CCR), Section 2500, and et seq. This code requires the reporting of communicable diseases to the local health department by health care providers (physician, physician assistant, veterinarian, podiatrist, school nurse, infection control practitioner, medical examiner, coroner or dentist). Additionally, persons in charge of a public or private school, kindergarten, boarding school or day care must report anyone suspected of having a communicable disease to the local health department.

Various sources were used to compile this summary. The population estimates are from the State of California, Department of Finance. The county morbidity data are obtained from the Automated Vital Statistics System and the County of Orange AIDS Case Registry. State case rates are provisional, unpublished data from the State of California Department of Health Services, Division of Communicable Disease Control, Surveillance and Statistics Section, Sexually Transmitted Disease Control Branch, and Tuberculosis Control Branch. United States rates are from the Center for Disease Control's *Summary of Notifiable Diseases, United States, 1998* (MMWR 47(53);1-93). Year 2000 objectives are from the National Center for Health Statistics' Healthy People 2000 Midcourse Revisions and 1995 Additions.

While the information presented can be considered official 1998 data, provisional data for 1999 is currently available in the Health Care Agency's *Public Health Bulletin*. Official data for 1999 is not expected to be released until the Fall of 2000.

If you have questions or comments regarding the data presented in this summary, or for more information on disease reporting, please call County of Orange Health Care Agency, Communicable Disease Control and Epidemiology at (714) 834-8180.

The *County of Orange Communicable Disease Summary 1998* is also available on the County of Orange website at <a href="http://www.oc.ca.gov/hca/public/cdce.htm">http://www.oc.ca.gov/hca/public/cdce.htm</a>.

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### Cases and Case Rates (per 100,000 population) of Reportable Diseases County of Orange, 1991--1993

YEAR		1991		1992		1993
MID-YEAR POPULATION*	2,462,700		2,519,400		2,554,700	
DISEASE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
AIDS	459	18.6	451	17.9	754	29.5
Amebiasis	86	3.5	125	5.0	98	3.8
Botulism	1	0.0	2	0.1	1	0.0
Brucellosis	2	0.1	3	0.1	1	0.0
Campylobacteriosis	316	12.8	307	12.2	354	13.9
Chancroid	1	0.0	1	0.0	0	0.0
Chlamydial Infection	3148	127.8	3223	127.9	4197	164.3
Cholera	0	0.0	7	0.3	0	0.0
Coccidioidomycosis	11	0.4	44	1.7	35	1.4
Cryptosporidiosis	16	0.6	19	0.8	21	0.8
Cysticercosis	37	1.5	24	1.0	27	1.1
Dengue	0	0.0	0	0.0	0	0.0
Echinococcosis (Hydatid Disease)	0	0.0	0	0.0	0	0.0
Encephalitis, Primary	9	0.4	8	0.3	12	0.5
Encephalitis, Post Infection	2	0.1	3	0.1	2	0.1
Encephalitis, Unknown	0	0.0	0	0.0	0	0.0
Encephalitis, Viral	0	0.0	0	0.0	0	0.0
Escherichia Coli O157:H7 Infection	NR	-	NR	-	7	0.3
Foodborne Disease Outbreaks	2	0.1	4	0.2	3	0.1
Giardiasis	497	20.2	670	26.6	684	26.8
Gonococcal Infection	958	38.9	1104	43.8	1095	42.9
Gonococcal Infection with PPNG	165	6.7	116	4.6	67	2.6
Haemophilus influenzae, Invasive Disease	18	0.7	15	0.6	11	0.4
Hemolytic Uremic Syndrome	NR	-	NR	-	0	0.0
Hepatitis A	304	12.3	280	11.1	414	16.2
Hepatitis B	116	4.7	108	4.3	73	2.9
Hepatitis B, Chronic	689	28.0	1467	58.2	1677	65.6
Hepatitis C	NR	-	NR	-	NR	_
Hepatitis C, Chronic	NR		NR		NR	-
Hepatitis D (Delta)	1	0.0	0	0.0	0	0.0
Hepatitis Non-A, Non-B	59	2.4	40	1.6	48	1.9
Hepatitis, Other	0	0.0	0	0.0	0	0.0
Hepatitis, Unspecified	23	0.9	29	1.2	40	1.6
Kawasaki Syndrome	17	0.7	21	0.8	23	0.9
Lead Poisoning	413	16.8	69	2.7	141	5.5
Legionellosis	9	0.4	4	0.2	6	0.2
Leprosy (Hansen's Disease)	1	0.0	7	0.3	6	0.2
Leptospirosis	0	0.0	1	0.0	0	0.0
Listeriosis	17	0.7	15	0.6	9	0.4
Lyme Disease	8	0.3	3	0.1	2	0.1
Lymphogranuloma Venereum	1	0.0	2	0.1	0	0.0
Malaria (Dubasia)	24	1.0	14	0.6	12	0.5
Measles (Rubeola)	290	11.8	13	0.5	1	0.0
Meningitis, Bacterial	42	1.7	48	1.9	48	1.9
Meningitis, Fungal	5	0.2	6	0.2	10	0.4
Meningitis, Parasitic	9	0.0	0	0.0	0 4	0.0
Meningitis, Unknown		0.4	18	0.7		0.2
Meningitis, Viral (Aseptic)	198 7	8.0	718	28.5	392	15.3
Meningococcal Meningitis	9	0.3	25 10	1.0	22	0.9
Meningococcal Infection, Other Invasive		0.4	10	0.4	16	0.6
Meningococcemia Mumps	0 34	0.0 1.4	0 12	0.0	0 11	0.0
Mumps Non-Gonococcal Urethritis	2190	88.9	1507	59.8	1246	0.4
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# Cases and Case Rates (per 100,000 population) of Reportable Diseases County of Orange, 1991--1993

YEAR		1991		1992		1993
MID-YEAR POPULATION*	2,462,700		2,519,400		2,554,700	
DISEASE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
Pelvic Inflammatory Disease	95	3.9	78	3.1	59	2.3
Pertussis (Whooping Cough)	9	0.4	27	1.1	33	1.3
Psittacosis	0	0.0	1	0.0	1	0.0
Q-fever	0	0.0	0	0.0	0	0.0
Relapsing Fever	0	0.0	2	0.1	0	0.0
Reye Syndrome	0	0.0	0	0.0	0	0.0
Rheumatic Fever, Acute	1	0.0	0	0.0	1	0.0
Rocky Mountain Spotted Fever	0	0.0	1	0.0	0	0.0
Rubella (German Measles)	15	0.6	3	0.1	1	0.0
Rubella Sydrome, Congenital	4	0.2	1	0.0	2	0.1
Salmonellosis (other than Typhoid Fever)	324	13.2	395	15.7	440	17.2
Scombroid Fish Poisoning	NR	-	NR	-	NR	-
Shigellosis, TOTAL	286	11.6	342	13.6	287	11.2
Shigellosis, Species Unspecified	286	11.6	342	13.6	287	11.2
Shigella A - Dysenteriae	NA	-	NA	-	NA	-
Shigella B - Flexneri	NA	-	NA	-	NA	-
Shigella C - Boydii	NA	-	NA	-	NA	-
Shigella D - Sonnei	NA	-	NA	-	NA	-
Shigella, Species Unknown	NA	-	NA	-	NA	-
Streptococcal Infection, Invasive Group A	0	0.0	0	0.0	0	0.0
Swimmer's Itch (Schistosomal Dermatitis)	0	0.0	0	0.0	2	0.1
Syphilis, TOTAL	387	15.7	345	13.7	417	16.3
Syphilis, Congenital	16	0.6	15	0.6	17	0.7
Syphilis, Early Latent	83	3.4	66	2.6	55	2.2
Syphilis, Latent	NA	0.0	15	0.6	11	0.4
Syphilis, Late Latent	218	8.9	196	7.8	318	12.4
Syphilis, Primary	40	1.6	31	1.2	9	0.4
Syphilis, Secondary	30	1.2	22	0.9	7	0.3
Syphilis, Other	0	0.0	0	0.0	0	0.0
Taeniasis	5	0.2	5	0.2	6	0.2
Tetanus	0	0.0	1	0.0	0	0.0
Toxic Shock Syndrome	1	0.0	0	0.0	3	0.1
Tuberculosis, TOTAL	305	12.4	411	16.3	431	16.9
Pulmonary TB	240	9.7	316	12.5	341	13.3
Pulm & Extrapulm TB	14	0.6	14	0.6	12	0.5
Extrapulmonary TB	51	2.1	81	3.2	78	3.1
Typhoid Fever, Carrier	2	0.1	1	0.0	3	0.1
Typhoid Fever, Case	11	0.4	7	0.3	4	0.2
Typhus Fever	0	0.0	0	0.0	1	0.0
Vibrio Infections	2	0.1	2	0.1	5	0.2
Yersiniosis	5	0.2	0	0.0	0	0.0

<sup>\*</sup>Source:

State of California, Department of Finance

NR=not reportable during count year NA=data not available for count year

# Cases and Case Rates (per 100,000 population) of Reportable Diseases County of Orange, 1994--1996

YEAR		1994		1995	1	1996
MID-YEAR POPULATION*	2,582,200	1774	2,614,800	1773	2,649,800	1770
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DISEASE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
AIDS	528	20.4	559	21.4	429	16.2
Amebiasis	56	2.2	51	2.0	36	1.4
Botulism	1	0.0	1	0.0	1	0.0
Brucellosis	2	0.1	5	0.2	2	0.1
Campylobacteriosis	348	13.5	442	16.9	455	17.2
Chancroid	0	0.0	0	0.0	1	0.0
Chlamydial Infection	4563	176.7	3303	126.3	2693	101.6
Cholera	0	0.0	3	0.1	0	0.0
Coccidioidomycosis	19	0.7	16	0.6	20	0.8
Cryptosporidiosis	22	0.9	28	1.1	11	0.4
Cysticercosis	25	1.0	15	0.6	14	0.5
Dengue	0	0.0	0	0.0	2	0.1
Echinococcosis (Hydatid Disease)	0	0.0	1	0.0	0	0.0
Encephalitis, Primary	8	0.3	1	0.0	1	0.0
Encephalitis, Post Infection	3	0.1	0	0.0	0	0.0
Encephalitis, Unknown	0	0.0	2	0.1	4	0.2
Encephalitis, Viral	0	0.0	0	0.0	2	0.1
Escherichia Coli O157:H7 Infection	3	0.0	6	0.0	6	0.1
Foodborne Disease Outbreaks	6	0.1	6	0.2	11	0.4
Giardiasis	421	16.3	391	15.0	365	13.8
Gonococcal Infection	879	34.0	717	27.4	421	15.9
Gonococcal Infection with PPNG	57	2.2	24	0.9	14	0.5
	6	0.2	11	0.9	15	0.6
Haemophilus influenzae, Invasive Disease						
Hemolytic Uremic Syndrome	0	0.0	0	0.0	0	0.0 12.0
Hepatitis A	380	14.7	438	16.8	319	
Hepatitis B. Chronia	62	2.4	83	3.2	69	2.6
Hepatitis B, Chronic	1244	48.2	1314	50.3	1459	55.1
Hepatitis C	NR	-	NR	-	NR	10.0
Hepatitis C, Chronic	NR	-	NR	-	317	12.0
Hepatitis D (Delta)	0	0.0	0	0.0	0	0.0
Hepatitis Non-A, Non-B	17	0.7	23	0.9	16	0.6
Hepatitis, Other	0	0.0	0	0.0	0	0.0
Hepatitis, Unspecified	22	0.9	22	0.8	18	0.7
Kawasaki Syndrome	20	0.8	13	0.5	14	0.5
Lead Poisoning	39	1.5	121	4.6	66	2.5
Legionellosis	3	0.1	7	0.3	3	0.1
Leprosy (Hansen's Disease)	0	0.0	3	0.1	14	0.5
Leptospirosis	0	0.0	0	0.0	0	0.0
Listeriosis	11	0.4	10	0.4	9	0.3
Lyme Disease	1	0.0	0	0.0	0	0.0
Lymphogranuloma Venereum	0	0.0	0	0.0	0	0.0
Malaria	16	0.6	10	0.4	20	0.8
Measles (Rubeola)	1	0.0	8	0.3	4	0.2
Meningitis, Bacterial	36	1.4	27	1.0	51	1.9
Meningitis, Fungal	5	0.2	13	0.5	6	0.2
Meningitis, Parasitic	0	0.0	0	0.0	0	0.0
Meningitis, Unknown	5	0.2	17	0.7	20	0.8
Meningitis, Viral (Aseptic)	241	9.3	183	7.0	205	7.7
Meningococcal Meningitis	9	0.3	12	0.5	17	0.6
Meningococcal Infection, Other Invasive	13	0.5	1	0.0	0	0.0
Meningococcemia	0	0.0	7	0.3	17	0.6
Mumps	17	0.7	10	0.4	14	0.5

### Cases and Case Rates (per 100,000 population) of Reportable Diseases County of Orange, 1994--1996

YEAR		1994		1995		1996
MID-YEAR POPULATION*	2,582,200	.,,.	2,614,800	1770	2,649,800	1770
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DISEASE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
Non-Gonococcal Urethritis	1365	52.9	1265	48.4	998	37.7
Pelvic Inflammatory Disease	48	1.9	48	1.8	32	1.2
Pertussis (Whooping Cough)	20	0.8	17	0.7	37	1.4
Psittacosis	0	0.0	0	0.0	1	0.0
Q-fever	0	0.0	0	0.0	0	0.0
Relapsing Fever	0	0.0	0	0.0	0	0.0
Reye Syndrome	1	0.0	0	0.0	1	0.0
Rheumatic Fever, Acute	0	0.0	0	0.0	0	0.0
Rocky Mountain Spotted Fever	0	0.0	0	0.0	0	0.0
Rubella (German Measles)	1	0.0	1	0.0	0	0.0
Rubella Sydrome, Congenital	1	0.0	0	0.0	0	0.0
Salmonellosis (other than Typhoid Fever)	637	24.7	665	25.4	568	21.4
Scombroid Fish Poisoning	NR	-	NR	-	NR	-
Shigellosis, TOTAL	312	12.1	455	17.4	321	12.1
Shigellosis, Species Unspecified	312	12.1	0	0.0	0	0.0
Shigella A - Dysenteriae	NA	-	3	0.1	4	0.2
Shigella B - Flexneri	NA	-	138	5.3	128	4.8
Shigella C - Boydii	NA	-	11	0.4	16	0.6
Shigella D - Sonnei	NA	-	302	11.5	173	6.5
Shigella, Species Unknown	NA	-	1	0.0	0	0.0
Streptococcal Infection, Invasive Group A	92	3.6	46	1.8	26	1.0
Swimmer's Itch (Schistosomal Dermatitis)	0	0.0	1	0.0	0	0.0
Syphilis, TOTAL	317	12.3	242	9.3	226	8.5
Syphilis, Congenital	17	0.7	23	0.9	15	0.6
Syphilis, Early Latent	46	1.8	33	1.3	22	0.8
Syphilis, Latent	15	0.6	8	0.3	10	0.4
Syphilis, Late Latent	213	8.2	161	6.2	156	5.9
Syphilis, Primary	11	0.4	8	0.3	8	0.3
Syphilis, Secondary	12	0.5	7	0.3	11	0.4
Syphilis, Other	3	0.1	2	0.1	4	0.2
Taeniasis	3	0.1	3	0.1	2	0.1
Tetanus	2	0.1	0	0.0	0	0.0
Toxic Shock Syndrome	2	0.1	0	0.0	2	0.1
Tuberculosis, TOTAL	368	14.3	336	12.8	273	10.3
Pulmonary TB	283	11.0	269	10.3	210	7.9
Pulm & Extrapulm TB	13	0.5	6	0.2	10	0.4
Extrapulmonary TB	72	2.8	61	2.3	53	2.0
Typhoid Fever, Carrier	2	0.1	0	0.0	0	0.0
Typhoid Fever, Case	10	0.4	7	0.3	9	0.3
Typhus Fever	0 3	0.0	0	0.0	0	0.0
Vibrio Infections		0.1	2	0.1	2	0.1
Yersiniosis	0	0.0	0	0.0	10	0.4

<sup>\*</sup>Source:

State of California, Department of Finance

NR=not reportable during count year NA=data not available for count year

# Cases and Case Rates (per 100,000 population) of Reportable Diseases County of Orange, 1997--1998

YEAR		1997		1998
MID-YEAR POPULATION*	2,705,300	1,,,,	2,763,900	1770
TEARLY OF GEATTOR	2,700,000		2,700,700	
DISEASE	NUMBER	RATE	NUMBER	RATE
AIDS	283	10.5	305	11.0
Amebiasis	41	1.5	26	0.9
Botulism	2	0.1	4	0.1
Brucellosis	1	0.0	0	0.0
Campylobacteriosis	403	14.9	284	10.3
Chancroid	2	0.1	0	0.0
Chlamydial Infection	3292	121.7	3498	126.6
Cholera	0	0.0	2	0.1
Coccidioidomycosis	15	0.6	11	0.4
Cryptosporidiosis	13	0.5	21	0.8
Cysticercosis	21	0.8	15	0.5
Dengue	0	0.0	1	0.0
Echinococcosis (Hydatid Disease)	0	0.0	0	0.0
Encephalitis, Primary	0	0.0	0	0.0
Encephalitis, Post Infection	0	0.0	0	0.0
Encephalitis, Unknown	4	0.1	10	0.4
Encephalitis, Viral	2	0.1	0	0.0
Escherichia Coli O157:H7 Infection	6	0.2	11	0.4
Foodborne Disease Outbreaks	12	0.4	11	0.4
Giardiasis	321	11.9	272	9.8
Gonococcal Infection	438	16.2	516	18.7
Gonococcal Infection with PPNG	23	0.9	5	0.2
Haemophilus influenzae, Invasive Disease	13	0.5	6	0.2
Hemolytic Uremic Syndrome	0	0.0	1	0.0
Hepatitis A	348	12.9	228	8.2
Hepatitis B	73	2.7	90	3.3
Hepatitis B, Chronic	1474	54.5	1693	61.3
Hepatitis C	NR	-	10	0.4
Hepatitis C, Chronic	921	34.0	1751	63.4
Hepatitis D (Delta)	3	0.1	3	0.1
Hepatitis Non-A, Non-B	14	0.5	4	0.1
Hepatitis, Other	6	0.2	10	0.4
Hepatitis, Unspecified	17	0.6	11	0.4
Kawasaki Syndrome	19	0.7	16	0.6
Lead Poisoning	25	0.9	13	0.5
Legionellosis	3	0.1	5	0.2
Leprosy (Hansen's Disease)	11	0.4	4	0.1
Leptospirosis	0	0.0	0	0.0
Listeriosis	12	0.4	12	0.4
Lyme Disease	0	0.0	1	0.0
Lymphogranuloma Venereum	1	0.0	0	0.0
Malaria	18	0.7	16	0.6
Measles (Rubeola)	4	0.1	2	0.1
Meningitis, Bacterial	42	1.6	37	1.3
Meningitis, Fungal	8	0.3	11	0.4
Meningitis, Parasitic	0	0.0	0	0.0
Meningitis, Unknown	31	1.1	20	0.7
Meningitis, Viral (Aseptic)	275	10.2	586	21.2
Meningococcal Meningitis	8	0.3	6	0.2
Meningococcal Infection, Other Invasive	1	0.0	1	0.0
Meningococcemia	14	0.5	16	0.6
Mumps	11	0.4	10	0.4
marrips	. ''	0.4	10	0.7

### Cases and Case Rates (per 100,000 population) of Reportable Diseases County of Orange, 1997--1998

YEAR		1997		1998	
MID-YEAR POPULATION*	2,705,300	1,,,,	2,763,900	1770	
INITE TEAK TOT GEATION	2,703,300		2,703,700		
DISEASE	NUMBER	RATE	NUMBER	RATE	
Non-Gonococcal Urethritis	1014	37.5	665	24.1	
Pelvic Inflammatory Disease	62	2.3	59	2.1	
Pertussis (Whooping Cough)	12	0.4	13	0.5	
Psittacosis	1	0.0	1	0.0	
Q-fever	0	0.0	1	0.0	
Relapsing Fever	0	0.0	0	0.0	
Reye Syndrome	0	0.0	0	0.0	
Rheumatic Fever, Acute	0	0.0	1	0.0	
Rocky Mountain Spotted Fever	0	0.0	0	0.0	
Rubella (German Measles)	0	0.0	0	0.0	
Rubella Sydrome, Congenital	0	0.0	0	0.0	
Salmonellosis (other than Typhoid Fever)	551	20.4	334	12.1	
Scombroid Fish Poisoning	4	0.1	5	0.2	
Shigellosis, TOTAL	212	7.8	202	7.3	
Shigellosis, Species Unspecified	0	0.0	0	0.0	
Shigella A - Dysenteriae	4	0.1	2	0.1	
Shigella B - Flexneri	70	2.6	61	2.2	
Shigella C - Boydii	11	0.4	5	0.2	
Shigella D - Sonnei	125	4.6	133	4.8	
Shigella, Species Unknown	2	0.1	1	0.0	
Streptococcal Infection, Invasive Group A	62	2.3	63	2.3	
Swimmer's Itch (Schistosomal Dermatitis)	0	0.0	0	0.0	
Syphilis, TOTAL	198	7.3	178	6.4	
Syphilis, Congenital	19	0.7	8	0.3	
Syphilis, Early Latent	11	0.4	11	0.4	
Syphilis, Latent	9	0.3	0	0.0	
Syphilis, Late Latent	150	5.5	135	4.9	
Syphilis, Primary	2	0.1	13	0.5	
Syphilis, Secondary	5	0.2	11	0.4	
Syphilis, Other	2	0.1	0	0.0	
Taeniasis	1	0.0	0	0.0	
Tetanus	1	0.0	1	0.0	
Toxic Shock Syndrome	2	0.1	2	0.1	
Tuberculosis, TOTAL	330	12.2	298	10.8	
Pulmonary TB	247	9.1	197	7.1	
Pulm & Extrapulm TB	26	1.0	72	2.6	
Extrapulmonary TB	57	2.1	29	1.0	
Typhoid Fever, Carrier	1	0.0	0	0.0	
Typhoid Fever, Case	4	0.1	8	0.3	
Typhus Fever	0	0.0	0	0.0	
Vibrio Infections	0	0.0	4	0.1	
Yersiniosis	5	0.2	11	0.4	

<sup>\*</sup>Source:

State of California, Department of Finance

NR=not reportable during count year NA=data not available for count year

#### Vaccine-Preventable Diseases

During the period covered by this report, routine childhood vaccinations were recommended for diphtheria, *Haemophilus influenzae* type B<sup>1</sup> (Hib), hepatitis B<sup>2</sup>, measles, mumps, pertussis (whooping cough), polio, rubella, tetanus, and varicella (chickenpox)<sup>3</sup>.

When compared to the pre-vaccine era, full implementation of childhood vaccination has resulted in more than 90% reductions in these diseases<sup>4</sup> and the near elimination of polio and diphtheria.

All of the vaccine-preventable diseases for which routine childhood immunizations are available are reportable diseases in California except for varicella, which is, therefore, not included in this report.

#### **Diphtheria**

The last case of diphtheria in Orange County was reported in 1974. 2 cases were reported in that year.

#### Haemophilus influenzae type B

See page 23.

#### Hepatitis B

See page 25.

#### Measles

The most recent major epidemic of measles in Orange County, and the United States, occurred from 1988 to 1991. Prior to that time, from 1981 to 1987, an average of 14 cases of measles was reported from Orange County each year. The number and rate of measles cases from 1987 through 1998 are shown in the table. 2 children under 1 year of age, and therefore too young to have been immunized, died due to measles during the epidemic.

Year	Number of cases	Rate per 100,000 population
1987	12	0.5
1988	109	4.8
1989	395	17.2
1990	707	29.3
1991	290	11.8
1992	13	0.5
1993	1	0.0
1994	1	0.0
1995	8	0.3
1996	4	0.2
1997	4	0.1
1998	2	0.1

<sup>&</sup>lt;sup>1</sup> Recommended for infants as part of routine immunizations starting in January 1991.

<sup>&</sup>lt;sup>2</sup> Recommended for infants as part of routine immunizations starting in November 1991.

<sup>&</sup>lt;sup>3</sup> Recommended for children as part of routine immunizations starting in July 1996.

<sup>&</sup>lt;sup>4</sup> Excluding hepatitis B and varicella, which have not yet been fully implemented.

The recommendation for a routine second dose of measles vaccine was made in December 1989. California began requiring a second dose of a measles-containing vaccine (usually given as measles, mumps, and rubella combined vaccine) for kindergarten entry in August 1997. As of July 1999, California requires that children entering 7<sup>th</sup> grade have 2 doses of a measles-containing vaccine.

All reported suspect measles cases are investigated, and laboratory confirmation is attempted for every case. Viral sequencing can help determine the source of the measles virus. In recent years, a large proportion of measles cases (71% in 1998) in the United States have been international importations or linked to international importations of measles virus—visitors from other countries or U.S. residents who contracted their infection while in other countries, their contacts in the U.S. who developed measles, and cases with an imported strain of measles virus. The provisional total of 100 measles cases reported in the U.S. in 1998 is the lowest number on record.

#### <u>Mumps</u>

See page 38.

#### Pertussis (whooping cough)

See page 41.

#### Polio

The last case of paralytic polio in Orange County was reported in 1966. In September 1985, the Pan-American Health Organization adopted the goal of eradicating polio from the Americas. The last case of naturally occurring polio in the Americas was detected in 1991 in Peru. Since 1979, the only cases of polio reported in the United States have been associated with use of the live oral poliovirus vaccine (OPV). In 1997, the Advisory Committee on Immunization Practices recommended a sequential schedule of inactivated poliovirus vaccine (IPV) followed by OPV. With progress in the global polio eradication campaign making importation of poliovirus into the United States unlikely, further change to an all IPV vaccine schedule was recommended in June 1999, with implementation planned for January 2000.

#### Rubella and Congenital Rubella Syndrome

An estimated 30-50% of rubella cases are subclinical, and, even when symptoms do occur, the illness is usually mild. Rubella is sometimes misdiagnosed as measles, scarlet fever, or other rash illnesses. All of these factors lead to under-diagnosis and under-reporting of rubella. The most serious outcome of rubella is infection during a woman's pregnancy, resulting in congenital infection of the fetus.

The most recent increase in rubella occurred in 1990 when 78 cases were reported (rate of 3.2 per 100,000 population); 45 of these cases occurred as part of an outbreak in the Orange County jail, primarily among male inmates. Following the increase in rubella in 1990, a study of congenital rubella syndrome (CRS) cases was done to determine if there had been missed opportunities for prevention through prior vaccination of the mother. The 6 Orange County cases (1 reported in 1990, 4 in 1991 and 1 in 1992) that were included in the study had few missed opportunities. Most were not married, had been born and gone to school in Mexico, and 4/6 had no prior pregnancy. In 1 instance, testing and vaccination following a previous ectopic pregnancy could have prevented 1 case of CRS.

Since most measles vaccine is given in combination with rubella and mumps vaccines (MMR), the recommendation for a routine second dose of measles vaccine for children, made in December 1989, has had the effect of providing a second dose of rubella vaccine as well.

#### Tetanus

The few cases reported in recent years in Orange County have involved mostly male Hispanic adults with unknown or no history of immunization. California has averaged 7 cases of tetanus per year in the last five years, the vast majority in adult males. Cases have followed wounds acquired at home or in agricultural work and in injection drug users.

#### Morbidity pages

**AIDS** 

**Amebiasis** 

Campylobacteriosis

Chlamydial Infection

Cryptosporidiosis

Cysticercosis

Encephalitis

E. coli O157:H7 Infection

Foodborne Disease Outbreaks

Giardiasis

Gonococcal Infection

Haemophilus influenzae

Hepatitis A

Hepatitis B, Acute

Hepatitis B, Chronic

Hepatitis C, Acute

Hepatitis C, Chronic

Hepatitis Other/Unspecified

Kawasaki Syndrome

Legionellosis

Listeriosis

Malaria

Meningitis, Aseptic

Meningitis, Bacterial

Meningitis, Other

Meningococcal Disease

Mumps

Non-Gonococcal Urethritis

Pelvic Inflammatory Disease

Pertussis

Salmonellosis

Shigellosis

Streptococcal Infection, Invasive Group A

Syphilis, Early

Syphilis, Total, All Stages

Typhoid Fever, Case

**Tuberculosis** 

Yersiniosis

### AIDS

 Rate per 100,000 population:
 1997
 1998

 Orange County
 10.5
 11.0

 California
 21.8
 17.3

 United States
 21.9
 17.2

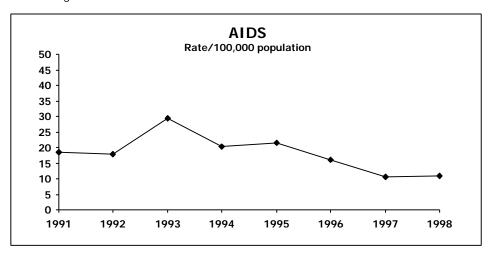
- From 1982 through 1998, a total of 5,149 Orange County residents with AIDS had been reported.
- 305 cases were reported in 1998, an 8% increase over the 283 cases reported in 1997. This increase was due to improved surveillance efforts with active surveillance expanded to new sites.
- As shown below, local trends in AIDS case rates per 100,000 mirror national trends, with greatest increase among non-White males and among females.

Adult/Adolescent rates:	<u>1990</u>	<u> 1998</u>
White males	42.3	22.2
African-American males	66.5	85.4
Latino males	20.3	35.8
Females	1.4	2.9

- As of December 1998, an estimated 2,345 Orange County residents were living with AIDS, more than double the number of six years ago (1,103).
- An estimated 6,700 Orange County residents are currently living with HIV/AIDS, less than one-half of one percent of the adult/adolescent population (0.31%). Forty-five percent have been diagnosed with AIDS.

N	Α

Orange County	1994	1995	1996	1997	1998
Total Cases	528	559	429	283	305
Gender					
Male	487	499	384	253	272
Female	41	60	45	30	33
Unknown	0	0	0	0	0
Ethnicity					
White	346	376	270	151	161
Black	26	27	22	18	17
Hispanic	140	136	120	103	115
Southeast Asian	9	11	10	7	7
Other Asian	4	3	2	3	1
Other/Unknown	3	6	5	1	4
Age					
Under 1 year	0	0	0	1	0
1-4	2	1	1	0	2
5-9	0	0	0	0	2
10-14	0	1	0	0	0
15-19	2	0	0	2	2
20-24	17	21	12	4	9
25-34	224	218	156	106	115
35-44	195	214	168	114	113
45-54	59	79	69	37	50
55-64	23	22	19	14	8
65 & over	6	3	4	5	4
Unknown	0	0	0	0	0



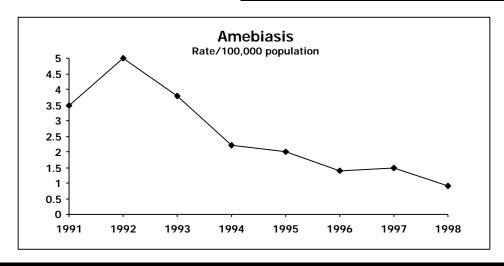
### Amebiasis

Rate per 100,000 population: 1997 1998
Orange County 1.5 0.9
California 2.8 2.1
United States NN NN

NA

- Reported cases of amebiasis have been declining since 1992 when 125 cases (5.0/100,000) were reported.
- At least 2 factors have contributed to the decline in cases:
  - 1) The number of officially arriving refugees, who are routinely screened for parasites, has decreased from more than 6,000 in the early 1990s to just under 1,000 in 1998.
  - 2) In February of 1998 the Orange County Public Health Laboratory instituted testing to differentiate between *Entamoeba histolytica* and *E. dispar*. This latter species is microscopically identical to *E. histolytica* but is not pathogenic. It is the species most often found in asymptomatic cyst passers.

Orange County	1994	1995	1996	1997	1998
Total Cases	56	51	36	41	26
Gender					
Male	29	33	26	25	14
Female	27	18	10	16	12
Unknown	0	0	0	0	0
Ethnicity					
White	5	7	6	5	4
Black	2	0	3	0	0
Hispanic	29	22	11	16	15
Southeast Asian	9	18	15	16	2
Other Asian	2	0	1	1	1
Other/Unknown	9	4	0	3	4
Age					
Under 1 year	0	0	0	0	0
1-4	3	2	4	1	1
5-9	5	9	2	3	2
10-14	10	10	2	0	0
15-19	7	5	1	4	2
20-24	3	1	4	5	4
25-34	10	7	4	10	5
35-44	8	9	6	9	6
45-54	6	3	9	4	2
55-64	2	3	4	4	3
65 & over	2	2	0	1	1
Unknown	0	0	0	0	0



## ■ Campylobacteriosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 14.9
 10.3

 California
 23.1
 18.1

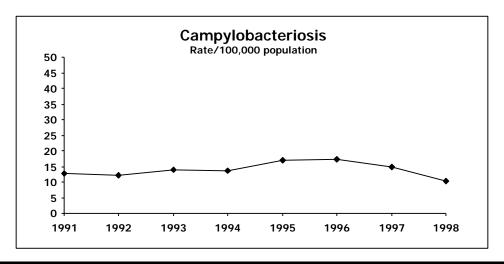
 United States
 NN
 NN

Year 2000 Objective

- In 1998, reported cases of campylobacteriosis in Orange County dropped to their lowest rate since 1981.
- Most cases are sporadic, with a summertime peak in incidence.
- Serious sequelae can occur, including Guillain-Barré Syndrome and reactive arthritis.
- Poultry, meat and raw milk are the most common food sources of *Campylobacter* for humans. Waterborne disease has also been reported.
- Major risk factors include handling raw poultry and eating undercooked poultry. Additional risk factors are contact with dogs and cats, especially juvenile animals with diarrhea.

Orange County	1994	1995	1996	1997	1998
Total Cases	348	442	455	403	284
Gender					
Male	167	233	234	224	152
Female	180	208	220	179	132
Unknown	1	1	1	0	0
Ethnicity					
White	96	126	117	91	61
Black	1	4	1	2	3
Hispanic	54	103	88	64	41
Southeast Asian	0	1	5	3	5
Other Asian	8	9	10	9	11
Other/Unknown	189	199	234	234	163
Age					
Under 1 year	12	17	17	9	4
1-4	32	66	52	53	35
5-9	14	16	29	32	33
10-14	8	15	22	11	9
15-19	12	19	15	14	11
20-24	26	41	29	17	21
25-34	98	98	97	74	43
35-44	52	69	80	71	39
45-54	39	38	51	51	40
55-64	17	19	25	19	24
65 & over	38	43	35	51	25
Unknown	0	1	3	1	0

25.0/100,000



# Chlamydial Infection

 Rate per 100,000 population:
 1997
 1998

 Orange County
 121.7
 126.6

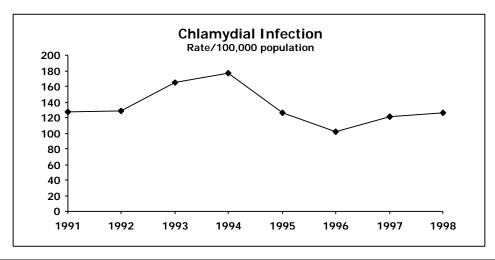
 California
 208.5
 231.1

 United States
 196.8
 236.6

NA

- Genital Chalmydia trachomatis infection is the most common reportable infection in Orange County and the United States.
- Adolescents aged 15-19 and young adults aged 20-24 years have the highest rates of chlamydial infection.
- An estimated 70-80% of women and 50% of men with chlamydia have no noticeable symptoms of infection and thus are unlikely to seek health care.
- After chlamydia became reportable in California in March 1989, the number of reported cases in Orange County rose rapidly, peaking in 1994 at 4,563.
- New, highly sensitive, non-invasive (urine-based) tests have recently become available, which is expected to result in an increase in the number of cases detected and reported.

Orange County	1994	1995	1996	1997	1998
Total Cases	4563	3303	2693	3292	3498
Gender					
Male	549	388	465	657	803
Female	3925	2827	2219	2615	2681
Unknown	89	88	9	20	14
Ethnicity					
White	983	839	614	246	299
Black	112	72	57	73	87
Hispanic	1831	1595	1403	785	945
Southeast Asian	100	54	34	11	20
Other Asian	101	98	91	86	113
Other/Unknown	1436	645	494	2091	2034
Age					
Under 1 year	7	7	7	17	10
1-4	0	5	1	1	1
5-9	1	1	0	2	2
10-14	72	63	35	50	52
15-19	1349	928	784	966	952
20-24	1425	1045	872	1100	1141
25-34	1077	836	739	847	939
35-44	268	157	151	196	233
45-54	60	36	23	33	41
55-64	4	7	8	7	8
65 & over	14	3	6	7	13
Unknown	286	215	67	66	106



# Cryptosporidiosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.5
 0.8

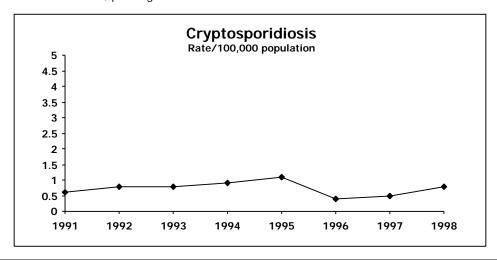
 California
 1.0
 1.1

 United States
 1.1
 1.6

NA

- Since cryptosporidiosis became reportable in California in 1989, the annual number of reported cases in Orange County has fluctuated between 11 and 28 cases (rate of 0.4 to 1.1 per 100,000).
- Transmission is by the fecal oral route and can be person-to-person, animal-toperson, waterborne or foodborne. Both foodborne and waterborne (including potable and recreational water) outbreaks have been reported in the United States.
- Persons at increased risk for cryptosporidiosis include child care workers, diaper-aged children who attend child care centers, persons exposed to human feces by sexual contact, and caregivers of infected persons.
- People who are immunocompromised, particularly when due to HIV infection, are at risk for severe, prolonged disease.

Orange County	1994	1995	1996	1997	1998
Total Cases	22	28	11	13	21
Gender					
Male	13	17	7	8	15
Female	9	11	4	5	6
Unknown	0	0	0	0	0
Ethnicity					
White	8	11	4	4	5
Black	0	1	0	0	0
Hispanic	1	5	2	0	2
Southeast Asian	0	0	0	0	0
Other Asian	0	0	0	0	0
Other/Unknown	13	11	5	9	14
Age					
Under 1 year	0	0	0	0	0
1-4	4	2	0	1	5
5-9	1	2	0	1	3
10-14	0	2	0	0	2
15-19	0	0	0	0	1
20-24	1	3	0	0	0
25-34	7	6	3	3	5 2
35-44	8	10	6	4	2
45-54	1	2	1	3	2
55-64	0	0	1	0	0
65 & over	0	1	0	1	1
Unknown	0	0	0	0	0



## Cysticercosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.8
 0.5

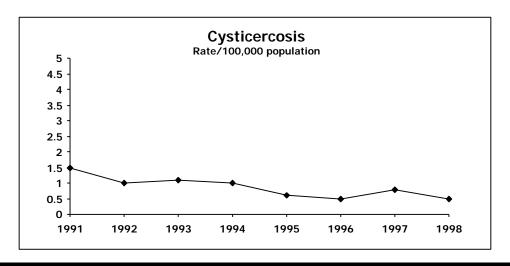
 California
 0.4
 0.2

 United States
 NN
 NN

NA

- Cysticercosis is endemic in rural areas of Latin America, Asia, and Africa and is most often recognized as neurocysticercosis, infection of the central nervous system with the larval stage of the pork tapeworm, Taenia solium.
- Of the 15 cases reported in Orange County in 1998, 14 were born in or had traveled to areas where the pork tapeworm is endemic.
- Household contact with a person infected by the pork tapeworm can result in ingestion of the tapeworm eggs and, ultimately, in cysticercosis.

Orange County	1994	1995	1996	1997	1998
Total Cases	25	15	14	21	15
Gender					
Male	17	9	9	10	
Female	8	6	5	11	3
Unknown	0	0	0	0	0
Ethnicity					
White	1	1	0	0	1
Black	0	0	0	0	0
Hispanic	18	14	12	21	14
Southeast Asian	2	0	0	0	0
Other Asian	2	0	0	0	0
Other/Unknown	2	0	2	0	0
Age					
Under 1 year	0	0	0	0	0
1-4	2	1	3	0	1
5-9	3	2	0	0	1
10-14	2	2	0	1	2
15-19	1	2	2	2	1
20-24	4	4	0	5	3
25-34	9	2	5	6	6
35-44	1	2	1	4	1
45-54	2	0	1	2	0
55-64	1	0	1	0	0
65 & over	0	0	1	1	0
Unknown	0	0	0	0	0



## Encephalitis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.2
 0.4

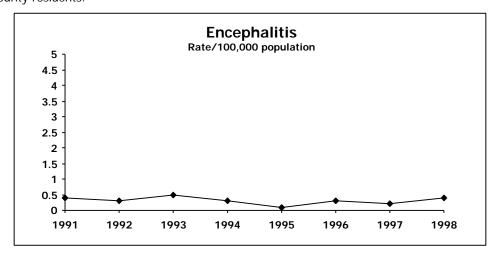
 California
 0.2
 0.4

 United States
 NA
 0.1

NA

- This category includes viral and postinfectious encephalitis, as well as encephalitis of unknown etiology. All of the 10 cases reported in 1998 were of unknown etiology.
- Saint Louis Encephalitis (SLE) and Western Equine Encephalitis (WEE) are endemic to California and are transmitted by mosquitoes. These are seasonal diseases, occurring in the summer and early fall. Annual surveillance for these viruses through testing of mosquitoes, sentinel chicken flocks and small birds takes place each year from May through October.
- Public Health can facilitate diagnosis of SLE and WEE by forwarding blood specimens to the State for IgM antibody testing.
- The last known case of SLE in Orange County was reported in 1993.
- In 1984 the first urban outbreak of SLE occurred, with 26 cases in Southern California; 5 of these were Orange County residents.

Orange County	1994	1995	1996	1997	1998
Total Cases	8	3	7	6	10
Gender					
Male	7	3	3	3	9
Female	1	0	4	3	1
Unknown	0	0	0	0	0
Ethnicity					
White	4	2	5	3	5
Black	0	0	0	0	0
Hispanic	2	1	0	1	3
Southeast Asian	0	0	1	1	0
Other Asian	1	0	0	0	2
Other/Unknown	1	0	1	1	0
Age					
Under 1 year	1	1	2	1	0
1-4	0	0	1	0	1
5-9	4	1	0	0	2
10-14	0	0	0	0	0
15-19	0	0	0	0	0
20-24	1	0	1	0	0
25-34	1	0	1	1	2 1
35-44	0	1	0	1	
45-54	1	0	1	3	2
55-64	0	0	0	0	1
65 & over	0	0	1	0	1
Unknown	0	0	0	0	0



### ■ E. coli 0157:H7 Infection

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.2
 0.4

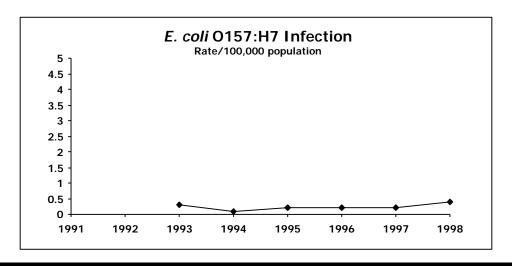
 California
 0.5
 0.8

 United States
 1.0
 1.3

4.0/100,000

- Escherichia coli O157:H7 infection became reportable in California in 1993.
- Of the 11 cases reported in 1998, none had hemolytic uremic syndrome or other complications, and none died.
- 1 case was part of an outbreak in Alpine, Wyoming, which was traced to the potable water system.
- 1 case was in Australia during the incubation period.
- All 11 of the 1998 cases had blood in their stool. This may mean that cases without bloody diarrhea are going undetected.
- Outbreaks have been most commonly associated with ground beef; however, many other vehicles have been identified in recent years, including lettuce, alfalfa sprouts, unpasteurized apple juice, and recreational water.
- 1 case of HUS was reported in 1998; no stool testing was done.

Orange County	1994	1995	1996	1997	1998
Total Cases	3	6	6	6	11
Gender					
Male	1	2	1	4	6
Female	2	4	5	2	5
Unknown	0	0	0	0	0
Ethnicity					
White	1	5	5	4	9
Black	1	0	0	0	0
Hispanic	0	1	0	2	1
Southeast Asian	0	0	0	0	0
Other Asian	0	0	0	0	0
Other/Unknown	1	0	1	0	1
Age					
Under 1 year	0	0	0	0	0
1-4	0	0	2	2	3
5-9	1	0	2	2	2
10-14	1	1	0	0	2
15-19	0	0	0	0	1
20-24	0	0	0	0	2
25-34	0	2	1	1	0
35-44	0	1	0	0	0
45-54	1	0	1	1	0
55-64	0	0	0	0	0
65 & over	0	2	0	0	1
Unknown	0	0	0	0	0



### **■** Foodborne Disease Outbreaks

Foodborne Outbreaks	1995	1996	1997	1998
Orange County				
Outbreaks	9	11	12	11
Number of Reported Cases	158	137	319	187
California				
Outbreaks	63	57	71	88
Number of Reported Cases	1219	1919	1951	3968

- "Foodborne disease outbreak" is defined in California Code of Regulations, Title 17, Section 2500, as "an incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness. Exceptions are single cases of botulism or chemical poisoning with laboratory confirmation of the causative agent in food.
- Foodborne outbreaks are not likely to be representative of all foodborne disease occurring in the County because foodborne outbreaks associated with meal events (banquets, receptions, pot lucks, etc.), where a group of people are assembled for one meal, are more likely to be recognized than other situations.
- Nationwide data indicate that improper holding temperature and poor personal hygiene of food handlers were, respectively, the first and second most commonly reported practices contributing to reported outbreaks.

1997 Foo	dborne (	Outbreaks				
Onset	Cases	Agent	Status	Vehicle	Prepped	Eaten
10/29/96	3	Salmonella Enteritidis	confirmed	drink with raw egg	private home	private home
11/3/96	25	unknown	unknown	BBQ chicken	restaurant	other
1/8/97	15	unknown	unknown	unknown	restaurant	restaurant
1/23/97	3	Salmonella Enteritidis	confirmed	possibly chile rellenos	restaurant	restaurant
1/31/97	13	Salmonella Montevideo	confirmed	chicken tacos suspected	restaurant	school
4/20/97	30	unknown	unknown	unknown	caterer	private home
4/25/97	23	unknown	unknown	unknown	restaurant	other
4/27/97	12	unknown	unknown	unknown	other	restaurant
5/5/97	26	unknown	unknown	unknown	restaurant	restaurant
6/21/97	13	Salmonella Enteritidis	confirmed	tiramisu	restaurant	restaurant
7/20/97	89	Salmonella Enteritidis	confirmed	Maki	church	church
10/6/97	79	unknown	suspected	beans	camp	camp
1998 Foo	dborne (	Outbreaks				
Onset	Cases	Agent	Status	Vehicle	Prepped	Eaten
9/27/97	20	C. perfringens	suspected	BBQ beans	caterer	picnic
		or B. cerus				
11/19/97	37	unknown	unknown	potato salad	caterer	other
1/7/98	8	unknown	unknown	unknown	restaurant	restaurant
4/11/98	7	unknown	unknown	pepperoni +/or sausage	church	private home
5/14/98	30	viral	suspected	fruit salad	private home	school
6/7/98	11	unknown	unknown	pepperoni/sausage pizza	restaurant	restaurant
7/6/98	7	unknown	unknown	sour cream	restaurant	restaurant
7/17/98	9	unknown	unknown	unknown	restaurant	other
8/20/98	12	unknown	unknown	sausage pizza	restaurant	other
11/22/98	40	unknown	unknown	crab salad puff pastry	caterer	other
12/11/98	6	unknown	unknown	unknown	restaurant	restaurant

### **■** Giardiasis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 11.9
 9.8

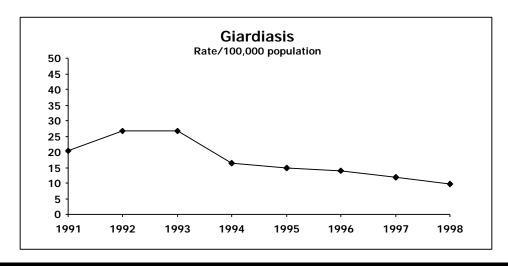
 California
 14.3
 12.8

 United States
 NN
 NN

NA

- Individual cases of giardiasis are not investigated by Orange County Public Health.
- Significant declines in the rate of giardiasis in Orange County have occurred in the mid- and late 1990s.
   Decreases in reported cases reflect large decreases among children less than 15 years of age, in whom reported cases declined 55% from 1994 to 1998.
- Reporting source was reviewed for cases reported from 1996 to 1998. There were declines in cases reported by Refugee Preventive Health Services (from 67 in 1996 to 27 cases in 1998), coinciding with a trend in decreasing numbers of officially arriving refugees, and by physicians (from 62 cases in 1996 to 39 cases in 1998).

<u> </u>	ı .				
Orange County	1994	1995	1996	1997	1998
Total Cases	421	391	365	321	272
Gender					
Male	216	211	193	156	141
Female	205	179	171	165	131
Unknown	0	1	1	0	0
Ethnicity					
White	73	79	98	79	53
Black	2	2	0	0	3
Hispanic	127	97	59	35	28
Southeast Asian	70	89	56	27	25
Other Asian	2	9	3	2	3
Other/Unknown	147	115	149	178	160
Age					
Under 1 year	7	6	2	1	2
1-4	125	102	80	71	70
5-9	88	79	52	36	29
10-14	43	50	34	20	14
15-19	10	10	21	12	5
20-24	9	9	16	13	11
25-34	49	59	52	54	54
35-44	44	41	46	54	40
45-54	19	14	29	34	21
55-64	13	14	16	10	14
65 & over	14	7	17	16	12
Unknown	0	0	0	0	0



### ■ Gonococcal Infection

 Rate per 100,000 population:
 1997
 1998

 Orange County
 17.0
 18.9

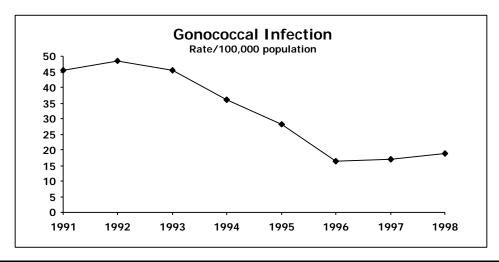
 California
 54.7
 59.0

 United States
 121.4
 132.9

- At 18.9 per 100,000 in 1998, the gonococcal (GC) infection rate in Orange County has dropped significantly since the early 1980s when rates were >300/100,000. Nevertheless, GC has increased in Orange County in the last 2 years.
- Cases of GC caused by N. gonorrhoeae resistant to fluoroquinolones have been reported sporadically from many parts of the world. Orange County submits a sample of isolates to CDC as part of surveillance for N. gonorrhoeae drug resistance. Isolates with decreased susecptibility to ciprofloxacin have been reported since at least 1993. Orange County had 4 such isolates from 1994 to 1996.

100.0/100,000
---------------

Orange County	1994	1995	1996	1997	1998
Total Cases	936	741	435	461	521
Gender					
Male	530	456	256	258	325
Female	394	268	177	199	194
Unknown	12	17	2	4	2
Ethnicity					
White	235	255	134	72	77
Black	95	50	38	27	25
Hispanic	296	264	191	81	102
Southeast Asian	13	2	4	0	0
Other Asian	23	13	8	5	11
Other/Unknown	274	157	60	276	306
Age					
Under 1 year	0	0	1	1	0
1-4	1	2	1	0	0
5-9	2	0	0	0	1
10-14	4	11	5	8	2
15-19	159	114	87	82	96
20-24	273	157	109	112	128
25-34	318	297	155	153	190
35-44	121	99	56	62	69
45-54	15	21	11	21	13
55-64	4	8	2	5	5
65 & over	0	3	2	5	3
Unknown	39	29	6	12	14



# Haemophilus influenzae

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.5
 0.2\*

 California
 0.6
 0.1\*

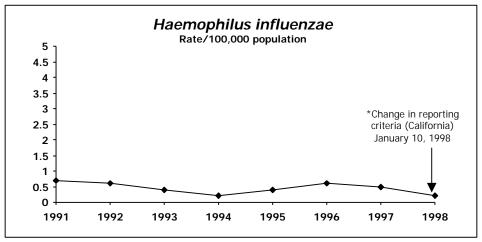
 United States
 0.4
 0.4

#### Year 2000 Objective

- Beginning in early 1998, only invasive cases less than 30 years of age were reportable in California. In prior years, 30-40% of Orange County cases have been 30 years of age or older, although 1994 was an exception due to no cases being reported in young children that year.
- Prior to introduction of effective vaccines, Haemophilus influenzae type b (Hib) was the leading cause of bacterial meningitis in children. In October of 1990, a Hib vaccine that was effective in infants was licensed.
- Before introduction of the first Hib vaccine, licensed in April of 1985 for use in children 24 months of age and older, only Hib meningitis was reportable beginning in 1983. The rate of Hib meningitis was 3.1 and 3.4/100,000 in Orange County in 1983 and 1984 respectively.
- Hib vaccine is effective only against invasive disease caused by Type B. Other types of *H. influenzae* commonly cause childhood ear infections.

#### NA

Orange County	1994	1995	1996	1997	1998
Total Cases	6	11	15	13	6
Gender					
Male	2	7	6	5	3
Female	4	4	9	8	3
Unknown	0	0	0	0	0
Ethnicity					
White	6	5	6	4	1
Black	0	0	0	0	0
Hispanic	0	5	8	6	4
Southeast Asian	0	0	0	0	0
Other Asian	0	0	0	0	0
Other/Unknown	0	1	1	3	1
Age					
Under 1 year	0	2	2	5	2
1-4	0	3	2	1	2
5-9	0	1	2	2	0
10-14	1	0	0	0	1
15-19	0	0	2	0	1
20-24	0	1	0	1	0
25-34	0	0	1	0	0
35-44	0	1	1	0	0
45-54	0	2	1	0	0
55-64	2	0	2	0	0
65 & over	3	1	2	4	0
Unknown	0	0	0	0	0



## Hepatitis A

 Rate per 100,000 population:
 1997
 1998

 Orange County
 12.9
 8.2

 California
 19.3
 12.5

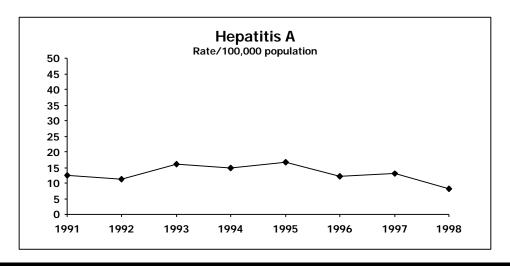
 United States
 11.2
 8.6

#### Year 2000 Objective

- The rate of hepatitis A in Orange County has steadily decreased since its peak in 1977 at 35.7 cases per 100,000 population.
- The hepatitis A vaccine was licensed in February 1995 for ages 2 years and older.
- Children aged 5-14 years accounted for 41% of the cases in 1998.
- Hispanics accounted for 55% and Whites for 33% of 1998 cases.
- Of the 182 1998 cases who were available for interview, the most common exposure factors cited were:
  - > 35.7% reported out-of-country travel (80% to Mexico) during their likely exposure period
  - > 32% reported contact to a hepatitis A case
  - > 9% had direct or indirect contact with a preschool child care setting

Orange County	1994	1995	1996	1997	1998
Total Cases	380	438	319	348	228
Gender					
Male	228	254	177	194	140
Female	152	184	142	154	88
Unknown	0	0	0	0	0
Ethnicity					
White	139	210	140	155	75
Black	4	8	2	1	1
Hispanic	143	164	134	144	125
Southeast Asian	4	3	1	0	3
Other Asian	7	14	9	10	8
Other/Unknown	83	39	33	38	16
Age					
Under 1 year	0	0	0	0	0
1-4	38	38	42	34	19
5-9	66	77	49	62	59
10-14	31	31	38	30	34
15-19	27	33	22	29	7
20-24	38	33	20	18	15
25-34	85	100	51	63	29
35-44	40	57	40	58	31
45-54	21	38	29	31	7
55-64	16	12	12	13	15
65 & over	17	18	16	10	12
Unknown	1	1	0	0	0

16.0/100,000



# ■ Hepatitis B, Acute

 Rate per 100,000 population:
 1997
 1998

 Orange County
 2.7
 3.3

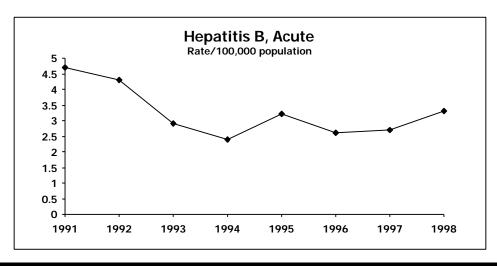
 California
 5.0
 4.3

 United States
 3.9
 3.8

NA

- The rate of hepatitis B virus (HBV) infection in Orange County had its most recent peak in 1986 at 26.6 per 100,000, despite the licensing of the first HBV vaccine in 1983. The rate in 1998 was 3.3/100,000.
- Many factors contributed to the longterm decline in the rate of acute HBV infection. Some of these are listed below.
  - ➤ In 1/91, a legal mandate to test all pregnant women for HBV infection took effect. This enabled more children to be protected from HBV infection at birth.
  - ➤ In 11/91, universal infant vaccination against HBV was recommended. This recommendation has been expanded to include all children through 18 years.
  - ➤ Since 8/97, California has required HBV vaccine for kindergarten entry.
  - ➤ In 3/92, the OSHA Bloodborne Pathogen Standard was promulgated, resulting in the vaccination of many health care workers.
  - ➤ The AIDS epidemic resulted in increased use of safe sex practices.

Orange County	1994	1995	1996	1997	1998
Total Cases	62	83	69	73	90
Gender					
Male	43	65	57	48	70
Female	19	18	12	25	20
Unknown	0	0	0	0	0
Ethnicity					
White	29	28	28	33	45
Black	3	5	3	1	3
Hispanic	10	26	19	14	11
Southeast Asian	4	7	5	6	11
Other Asian	4	3	4	10	14
Other/Unknown	11	14	10	9	6
Age					
Under 1 year	0	0	0	0	0
1-4	0	0	0	0	0
5-9	0	0	0	0	0
10-14	3	0	1	0	0
15-19	4	4	4	3	4
20-24	12	9	9	9	5
25-34	27	31	25	24	26
35-44	8	23	16	15	23
45-54	4	11	9	14	18
55-64	2	3	4	5	7
65 & over	2	2	1	3	7
Unknown	0	0	0	0	0



# **■** Hepatitis B, Chronic

 Rate per 100,000 population:
 1997
 1998

 Orange County
 54.5
 61.3

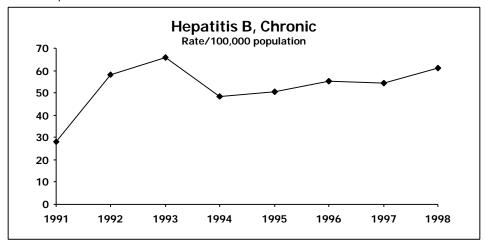
 California
 35.7
 35.3

 United States
 NN
 NN

NA

- In 1/91, a legal mandate to test all pregnant women for hepatitis B surface antigen went into effect. Once fully implemented, this law contributed significantly to a more than two-fold increase in reported chronically infected HBV cases.
- Other factors may have contributed to the maintenance of this dramatic increase, including:
  - a greater awareness of the disease due to the implementation of universal childhood vaccination against hepatitis B
  - requests by the California Department of Health Services for voluntary laboratory reporting followed in 2/96 by a requirement for laboratory reporting of all HBsAgpositive results
  - State funding of the perinatal hepatitis B program for screening of family contacts
  - other screening programs in the community
- The increasing number of male cases remains unexplained.

Orange County	1994	1995	1996	1997	1998
Total Cases	1244	1314	1459	1474	1693
Gender					
Male	561	602	684	770	935
Female	683	709	770	700	758
Unknown	0	3	5	4	0
Ethnicity					
White	71	54	84	68	93
Black	10	11	8	6	12
Hispanic	46	45	52	42	46
Southeast Asian	549	685	571	532	647
Other Asian	296	315	376	346	397
Other/Unknown	272	204	368	480	498
Age					
Under 1 year	0	0	0	1	1
1-4	11	4	2	3	6
5-9	18	21	17	13	15
10-14	34	53	49	33	31
15-19	129	81	99	95	105
20-24	184	168	168	136	130
25-34	322	369	413	401	492
35-44	268	295	310	372	402
45-54	161	208	218	243	295
55-64	70	60	104	99	149
65 & over	44	52	70	74	67
Unknown	3	3	9	4	0



# Hepatitis C, Acute

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.0
 0.4

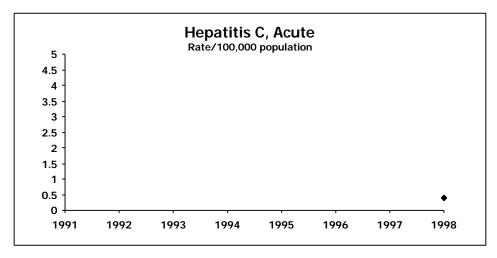
 California
 1.7
 1.4

 United States
 1.4
 1.3

NA

- Hepatitis C was made reportable in California in 2/96. Prior to that, it was reported as non-A, non-B hepatitis.
- Until 1998, no distinction between acute and chronic hepatitis C infections was made in California.
- The definition of a case of acute hepatitis C is: a patient with a test positive for hepatitis C antibody or hepatitis C viral RNA, a discrete onset of symptoms consistent with hepatitis, and elevated aminotransferase levels greater than 2.5 times the upper limit of normal.
- The overwhelming majority of hepatitis
  C virus infections reported in Orange
  County are reported as or assumed to
  be chronic infections.
- In 1998, 10 cases of hepatitis C infection met the criteria for an acute case.

Orange County	1994	1995	1996	1997	1998
Total Cases	NR	NR	0	0	10
Gender					
Male					5
Female					5
Unknown					0
Ethnicity					
White					6
Black					0
Hispanic					3
Southeast Asian					0
Other Asian					0
Other/Unknown					1
Age					
Under 1 year					0
1-4					1
5-9					0
10-14					0
15-19					1
20-24					0
25-34					4
35-44					4
45-54					0
55-64					0
65 & over					0
Unknown					0



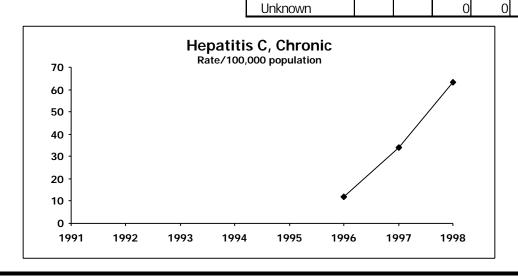
## **■** Hepatitis C, Chronic

Rate per 100,000 population: 1997 1998
Orange County 34.0 63.4
California 38.3 NA
United States NA NA

NA

- Hepatitis C virus (HCV) infection was made reportable in California in 2/96.
   Prior to that, it was reported as non-A, non-B hepatitis.
- The overwhelming majority of HCV infections reported in Orange County are reported as or assumed to be chronic infections.
- The first test for HCV antibody was licensed in 5/90. The second generation test, with improved specificity, became available in 1992.
- No protective antibody has been identified in HCV infected individuals. There remains no way to culture the virus.
- Major risk factors are injection drug use and receipt of blood products prior to 5/90.

1994	1995	1996	1997	1998
NR	NR	317	921	1751
		187	578	1160
		130	343	591
		0	0	0
		55	286	618
		4	14	22
		51	109	236
		22	71	181
		13	28	46
		172	413	648
		0	0	0
		0	3	3
		0	0	2
		1	0	5
		3	12	15
			12	39
		51	148	255
		110	341	628
		67	239	453
		41	79	194
		37	87	156
			NR NR 317  187 130 0 55 4 51 22 133 172 0 0 0 172 13 7 172 110 67 41	NR NR 317 921  187 578  130 343  0 0  55 286  4 14  51 109  22 71  13 28  172 413  172 413  0 0  0 0  1 0 0  3 12  7 12  51 148  110 341  67 239  41 79



# Hepatitis Other/Unspecified

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.9
 0.8

 California
 0.3
 0.3

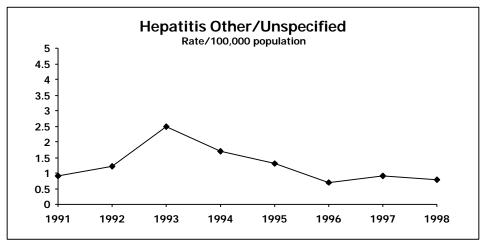
 United States
 NN
 NN

#### Year 2000 Objective

- This category includes cases of hepatitis with incomplete serological testing and cases in whom serological testing was completed but none of the tests was positive.
- Only one case of hepatitis E virus infection has been reported in an Orange County resident. That case, reported in 1993, had traveled to a country where hepatitis E is endemic.
- In 1998, 10 cases of "other" and 11 cases of "unspecified" hepatitis were reported.

#### NA

Orange County	1994	1995	1996	1997	1998
Total Cases	22	22	18	23	21
Gender					
Male	13	16	9	13	9
Female	9	6	9	10	12
Unknown	0	0	0	0	0
Ethnicity					
White	5	8	7	11	7
Black	0	0	1	0	0
Hispanic	10	11	6	8	8
Southeast Asian	2	0	1	1	2
Other Asian	0	0	1	0	0
Other/Unknown	5	3	2	3	4
Age					
Under 1 year	1	0	0	0	0
1-4	2	0	0	1	1
5-9	4	5	3	2	1
10-14	0	1	0	0	3 2
15-19	2	1	0	1	2
20-24	1	2	2	1	0
25-34	4	5	6	5	8
35-44	2	3	2	7	3
45-54	2	1	2	1	1
55-64	1	2	1	0	0
65 & over	2	2	2	5	2
Unknown	1	0	0	0	0



# ■ Kawasaki Syndrome

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.7
 0.6

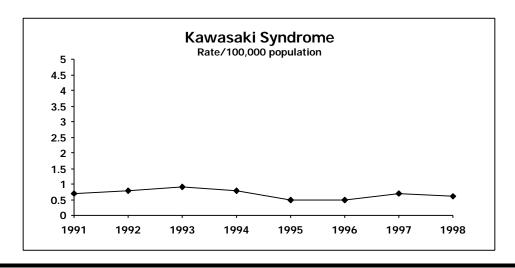
 California
 0.3
 0.4

 United States
 NN
 NN

NA

- Kawasaki Syndrome is thought to be due to an as yet undetermined infectious agent or its toxin.
- Orange County cases are typical of those reported in the literature: peak age 1-2 years, males more often affected than females.
- Rates in Asians are reportedly higher than those in whites.
- 15-25% of patients may develop coronary artery aneurysms or coronary arteritis; this proportion is reduced to 8% by treatment within 10 days of illness onset. Treatment involves use of intravenous immune globulin (IVIG) and aspirin.
- In 1998, 2 cases were noted to have coronary artery dilatation, and 1 case had a probable coronary artery aneurysm.

Orange County	1994	1995	1996	1997	1998
Total Cases	20	13	14	19	16
Gender					
Male	11	6	10	8	12
Female	9	7	4	11	4
Unknown	0	0	0	0	0
Ethnicity					
White	8	6	6	6	6
Black	1	2	0	0	0
Hispanic	5	1	6	7	4
Southeast Asian	1	2	0	0	1
Other Asian	3	1	2	6	2
Other/Unknown	2	1	0	0	3
Age					
Under 1 year	2	2	3	1	6
1-4	15	9	10	13	9
5-9	2	2	1	3	1
10-14	0	0	0	1	0
15-19	1	0	0	1	0
20-24	0	0	0	0	0
25-34	0	0	0	0	0
35-44	0	0	0	0	0
45-54	0	0	0	0	0
55-64	0	0	0	0	0
65 & over	0	0	0	0	0
Unknown	0	0	0	0	0



# Legionellosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.1
 0.2

 California
 0.2
 0.2

 United States
 0.4
 0.5

NA

Orange County

#### Year 2000 Objective

- Legionellosis comprises two clinical syndromes caused by Legionella bacteria: Pontiac fever, a mild febrile illness, and Legionnaires' disease (LD), characterized by pneumonia. No cases of Pontiac fever have been reported in Orange County.
- Legionella reproduce to high numbers in warm (95-115°F) stagnant water.
   Transmission occurs by inhalation of contaminated aerosols of water from cooling towers, whirlpool spas, showers, and other devices. LD is not spread from person to person.
- There are at least 39 species and 61 serogroups of Legionella. Legionella pneumophila (Lp) causes approximately 70% of LD. Culture, which detects all species, and the urine antigen test, which detects only Lp serogroup 1, are the most useful diagnostic tests.
- Of the 8 cases reported in 1997-1998, 5 were *Lp*1, 1 was *Lp*6, 1 was *Lp* with no serogrouping reported, and one was *L. bozemanii*.

Total Cases	3	7	3	3	5
Gender					
Male	2	5	2	2	4
Female	1	2	1	1	1
Unknown	0	0	0	0	0
Ethnicity					
White	2	5	3	2	5
Black	0	0	0	0	0
Hispanic	0	1	0	1	0
Southeast Asian	0	0	0	0	0
Other Asian	0	0	0	0	0
Other/Unknown	1	1	0	0	0
Age					
Under 1 year	0	0	0	0	0
1-4	0	0	0	0	0
5-9	0	0	0	0	0
10-14	0	0	0	0	0
15-19	0	0	0	0	0
20-24	0	0	0	0	0
25-34	0	0	0	1	0

1

0

1

0

0

1994

1995

1996

1997

0

0

1

0

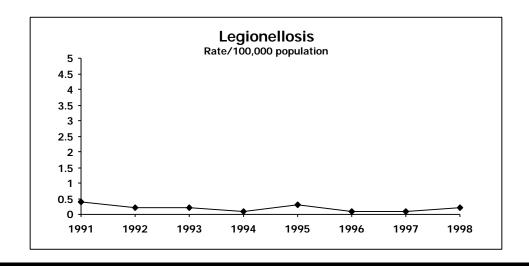
1

0

0

0

1998



35-44

45-54

55-64

65 & over

Unknown

### **■** Listeriosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.4
 0.4

 California
 0.3
 0.3

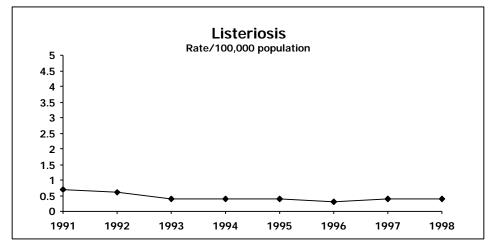
 United States
 NN
 NN

#### Year 2000 Objective

- Listeria monocytogenes is a bacterium that is commonly present and survives for long periods in the environment. It can grow at refrigeration temperatures and is resistant to high salt and acidity.
- Pregnant women, the elderly, and the immunocompromised are at increased risk of infection. Infection of pregnant women can result in loss of the pregnancy or sepsis or meningitis in the newborn.
- While not a common infection, listeriosis is often serious, with a CDC study showing that 68% are hospitalized and 20% die.
- In 12/96, the California Department of Health Services discontinued the requirement for listeriosis case histories.
- 17 of 24 cases in 1997 and 1998 had risk factor information: 9 were pregnant women or newborns and 8 were immunocompromised. Two of the pregnancies ended in stillbirths and 3 adults died.

#### 0.5/100,000

Orange County	1994	1995	1996	1997	1998
Total Cases	11	10	9	12	12
Gender					
Male	4	4	6	6	2
Female	7	6	3	6	10
Unknown	0	0	0	0	0
Ethnicity					
White	7	7	9	2	3
Black	0	0	0	2	0
Hispanic	0	1	0	2	5
Southeast Asian	2	1	0	0	1
Other Asian	1	1	0	0	1
Other/Unknown	1	0	0	6	2
Age					
Under 1 year	0	0	0	2	2
1-4	0	0	0	0	0
5-9	0	0	1	0	0
10-14	0	0	0	0	0
15-19	0	0	0	0	1
20-24	0	1	0	1	0
25-34	4	1	0	1	1
35-44	1	1	0	0	<u>2</u> 1
45-54	0	0	2	1	1
55-64	2	4	2	3	1
65 & over	4	3	4	4	4
Unknown	0	0	0	0	0



### ■ Malaria

 Rate per 100,000 population\*:
 1997
 1998

 Orange County
 0.7
 0.6

 California
 1.2
 0.6

 United States
 0.8
 0.6

NA

\* Numerator includes non-resident cases

Year 2000 Objective

- Unlike other reportable diseases, malaria reports include non-residents diagnosed in Orange County.
- Data are summarized for 54 cases reported in 1996 - 1998:
  - Species information (N= 54):
    Plasmodium vivax: 39 (72%)
    P. falciparum: 13 (24%)
    P. ovale: 1 (2%)
    Unknown: 1 (2%)
  - Travel history (N=50, total adds to >50 due to travel to more than one area):

Asia: 21 (42%); 13 mentioned India

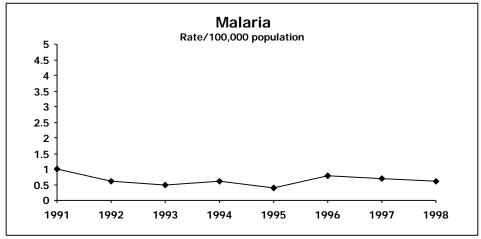
Africa: 16 (32%)

Central America/Caribbean: 14 (28%) South Pacific: 7 (14%); 5 to Papua New Guinea

Mexico: 4 (8%); all had also traveled elsewhere

- > 42/46 (91%) had illness onset in US
- > 14/47 (30%) were non-U.S. residents
- > 18/43 (42%) had a history of malaria prior to the current infection
- > 16/40(40%) reported some type of prophylaxis
- > 1/44 had a complication: hemolysis

Orange County	1994	1995	1996	1997	1998
Total Cases	16	10	20	18	16
Gender					
Male	10	5	14	13	7
Female	6	5	6	5	9
Unknown	0	0	0	0	0
Ethnicity					
White	5	4	9	9	7
Black	4	0	1	2	0
Hispanic	0	0	3	0	2
Southeast Asian	0	0	0	0	0
Other Asian	1	5	6	6	5
Other/Unknown	6	1	1	1	2
Age					
Under 1 year	0	0	0	0	0
1-4	1	0	2	0	1
5-9	0	0	0	2	0
10-14	0	1	0	0	1
15-19	1	0	1	2	1
20-24	2	1	2	2	1
25-34	3	3	4	6	6
35-44	5	1	3	1	1
45-54	2	2	4	3	3
55-64	1	0	2	2	2
65 & over	1	2	2	0	0
Unknown	0	0	0	0	0



## ■ Meningitis, Aseptic

 Rate per 100,000 population:
 1997
 1998

 Orange County
 10.2
 21.2

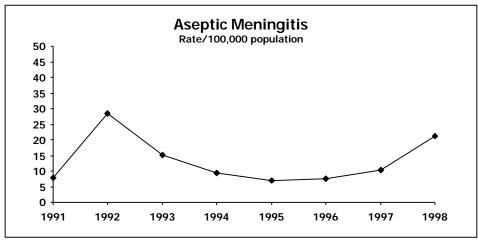
 California
 6.9
 9.1

 United States
 NN
 NN

#### Year 2000 Objective

- Aseptic meningitis is primarily composed of viral causes of meningitis, based on the chemistry results from cerebrospinal fluid (CSF) and the absence of other pathogens such as bacteria. In most instances, no viral culture is ordered.
- Since 1976, the rate of aseptic meningitis has topped 10/100,000 in 6 years: 1983 (11.5/100,000); 1987 (12.1); 1992 (28.5); 1993 (15.3); 1997 (10.2) and 1998 (21.2).
- In 1992 and in 1998, both large epidemic years, the virus Echo 30 appeared to predominate.
- Of 27 CSF specimens submitted to the Orange County Public Health Laboratory in 1998, 8 were Echo 30, 2 were Echo 9, 1 was Coxsackie B, and in 16 no virus was isolated.

Orange County	1994	1995	1996	1997	1998
Total Cases	241	183	205	275	586
Gender					
Male	123	105	117	133	320
Female	118	78	87	142	266
Unknown	0	0	1	0	0
Ethnicity					
White	106	88	87	135	273
Black	12	4	3	4	8
Hispanic	97	65	86	100	208
Southeast Asian	0	2	3	0	6
Other Asian	9	8	10	9	16
Other/Unknown	17	16	16	27	75
Age					
Under 1 year	82	57	69	87	88
1-4	32	18	21	28	44
5-9	19	14	17	30	110
10-14	11	11	11	18	77
15-19	10	8	7	9	44
20-24	17	13	8	15	33
25-34	39	30	32	37	102
35-44	22	20	25	28	62
45-54	5	8	12	11	18
55-64	0	2	2	4	4
65 & over	4	2	1	8	4
Unknown	0	0	0	0	0



# ■ Meningitis, Bacterial

 Rate per 100,000 population:
 1997
 1998

 Orange County
 1.6
 1.3

 California
 1.1
 1.0

 United States
 NN
 NN

#### Year 2000 Objective

- This reporting category excludes meningitis due to meningococcal infection.
- The etiologic bacterium was determined in 25/37 (68%) of the cases reported in 1998:

Pnemococcus: 17 (46%)

► Group B streptococcus (GBS): 3 (8%)

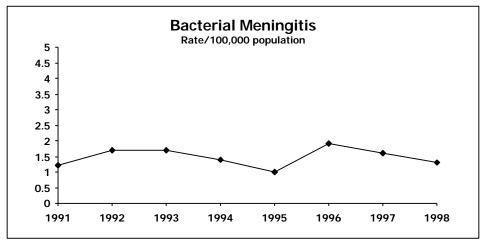
Staphylococcus aureus: 1 (3%)

Other: 4 (11%)Unknown: 12 (32%)

- There was one death reported in an 8year-old child who had an unknown etiology.
- The 3 GBS cases were aged 20 days, 32 days and 4 weeks. Current perinatal GBS prevention recommendations address early-onset (infants <7 days old) disease.</li>

#### 4.7/100,000

Orange County	1994	1995	1996	1997	1998
Total Cases	36	27	51	42	37
Gender					
Male	25	16	24	30	24
Female	11	11	27	12	13
Unknown	0	0	0	0	0
Ethnicity					
White	19	17	29	19	11
Black	3	0	1	0	0
Hispanic	12	7	15	17	18
Southeast Asian	0	0	1	0	1
Other Asian	1	1	3	2	2
Other/Unknown	1	2	2	4	5
Age					
Under 1 year	17	7	14	14	11
1-4	5	2	5	5	5
5-9	2	1	1	1	2
10-14	1	2	1	1	3
15-19	6	1	0	0	0
20-24	2	0	0	0	2 5
25-34	2	1	3	3	5
35-44	2	3	5	5	1
45-54	2	4	2	2	5
55-64	3	3	4	4	1
65 & over	0	3	7	7	2
Unknown	0	0	0	0	0



## ■ Meningitis, Other

 Rate per 100,000 population:
 1997
 1998

 Orange County
 1.4
 1.1

 California
 0.8
 0.9

 United States
 NN
 NN

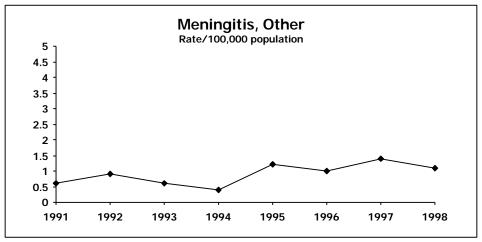
#### Year 2000 Objective

- This category includes fungal, parasitic, and unknown causes of meningitis.
- No parasites were reported as causing meningitis in the years 1991-1998
- Unknowns can be the result of antibiotic treatment preceding laboratory testing, incomplete laboratory testing, or negative etiologic results in the presence of abnormal cerebrospinal cell counts and chemistries.
- In 1998 there were 11 cases of fungal meningitis. All of these were due to cryptococcus.
  - 4 patients were known to have HIV infection; 2 of these died
  - 2 of the other 7 cases had a documented risk factor other than HIV infection
- The number of fungal/unknown cases for previous years is as follows:

1991: 5/9; 1992: 6/18; 1993: 10/4; 1994: 5/5; 1995: 13/17; 1996: 6/20;

1997: 8/31.

Orange County	1994	1995	1996	1997	1998
Total Cases	10	30	26	39	31
Gender					
Male		21	12	25	26
Female		9	14	14	5
Unknown		0	0	0	0
Ethnicity					
White		9	12	15	11
Black		2	0	0	0
Hispanic		13	12	16	14
Southeast Asian		1	0	1	1
Other Asian		3	1	2	0
Other/Unknown		2	1	5	4
Age					
Under 1 year		8	11	17	2
1-4		2	0	2	2
5-9		2	3	1	6
10-14		1	1	1	2
15-19		1	0	3	2
20-24		1	0	0	2
25-34		4	5	6	5
35-44		6	1	5	2
45-54		2	2	2	4
55-64		2	0	0	3
65 & over		1	3	2	1
Unknown		0	0	0	0



## ■ Meningococcal Disease

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.9
 0.8

 California
 1.2
 1.0

 United States
 1.2
 1.0

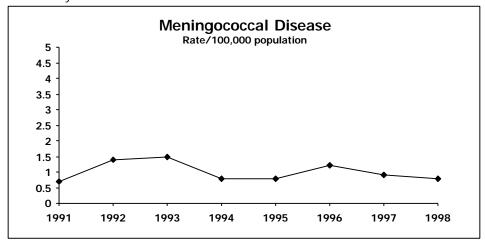
#### Year 2000 Objective

- Meningococcal disease includes meningococcal meningitis, meningococcemia, and other meningococcal infections such as pneumonia or infection of a joint.
- Orange County Public Health resumed routine serogrouping of meningococcal isolates in 1996. The distribution of serogroups by report year is as follows:

<u>Year</u>	В	С	Υ	<u> </u>	Unk
1996	6	10	11	0	7
1997	11	2	6	0	4
1998	10	1	5	1	6

- There were 5 deaths among cases reported in 1998.
- In 1998, 20 cases had a positive culture (5 CSF only, 4 CSF and blood, 11 blood only), 2 were positive on CSF antigen screen only, and 1 had purpura fulminans and a positive gram stain of the meninges.
- From 1995 through 1998, 50% of cases had their onset of illness in the first 3 months of the year.

Orange County	1994	1995	1996	1997	1998
Total Cases	22	20	34	23	23
Gender					
Male	11	13	21	12	10
Female	11	7	13	11	13
Unknown	0	0	0	0	0
Ethnicity					
White	7	8	21	15	10
Black	0	0	2	0	1
Hispanic	15	10	9	6	9
Southeast Asian	0	0	0	0	1
Other Asian	0	1	0	1	0
Other/Unknown	0	1	2	0	2
Age					
Under 1 year	6	4	4	3	2
1-4	6	3	2	3	5
5-9	2	2	2	1	2
10-14	0	0	7	2	3
15-19	2	5	7	2	4
20-24	3	1	2	6	0
25-34	0	1	2	1	0
35-44	1	2	2	1	2
45-54	2	1	4	1	1
55-64	0	0	2	2	2
65 & over	0	1	0	1	2
Unknown	0	0	0	0	0



## ■ Mumps

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.4
 0.4

 California
 0.5
 0.3

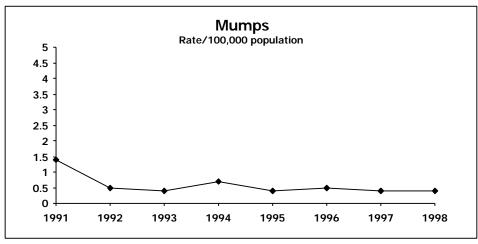
 United States
 0.3 (683 cases)
 0.3 (666 cases)

#### Year 2000 Objective

- The most recent peak in reported mumps cases was in 1989 and 1990 when 36 and 37 cases were reported, respectively.
- The vaccine currently in use was licensed in 1967. Declines in mumps cases since the early 1990s are probably a result of the implementation of a 2-dose schedule for the measles-mumps-rubella (MMR) vaccine as part of routine childhood immunizations and an increase in second doses given to college students.
- Up to 20% of mumps infections are asymptomatic. Another 40-50% of those infected may have only nonspecific or primarily respiratory symptoms. 30-40% develop the classic symptom of mumps--parotitis (inflammation of the salivary gland(s)).
- Additional manifestations of mumps infection are meningitis and orchitis, though the latter is unusual.

<500 U.S. cases annually

Orange County	1994	1995	1996	1997	1998
Total Cases	17	10	14	11	10
Gender					
Male	9	10	8	6	5
Female	8	0	5	5	5
Unknown	0	0	1	0	0
Ethnicity					
White	5	3	2	5	2
Black	0	1	0	0	0
Hispanic	6	6	4	2	4
Southeast Asian	0	0	0	0	1
Other Asian	2	0	4	1	2
Other/Unknown	4	0	4	3	1
Age					
Under 1 year	0	0	0	1	0
1-4	3	5	0	3	2
5-9	5	3	5	4	2 3 2
10-14	0	1	1	0	
15-19	3	0	3	0	0
20-24	2	0	1	0	0
25-34	3	1	3	1	1
35-44	1	0	0	1	2
45-54	0	0	0	1	0
55-64	0	0	0	0	0
65 & over	0	0	0	0	0
Unknown	0	0	1	0	0



### ■ Non-Gonococcal Urethritis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 37.5
 24.1

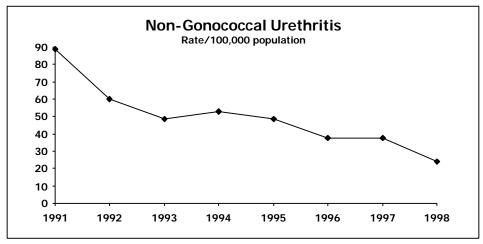
 California
 14.5
 15.3

 United States
 NN
 NN

#### Year 2000 Objective

- Prior to the separate reporting of Chlamydia infections in California in 1989, a significant proportion (23-55%) of nongonococcal urethritis (NGU) was due to Chlamydia. The decline in reported cases of NGU may reflect an increase in the specific diagnosis of Chlamydia in cases of urethritis.
- With the recent advent of urine detection tests for *Chlamydia*, reported cases of NGU may decline even further.
- According to the 1998 CDC STD
   Treatment Guidelines, Ureaplasma
   urealyticum and possibly Mycoplasma
   genitalium are implicated in up to 1/3 of
   non-Chlamydial NGU cases.
   Trichomonas vaginalis and herpes
   simplex virus also sometimes cause
   NGU.

Orange County	1994	1995	1996	1997	1998
Total Cases	1365	1265	998	1014	665
Gender					
Male	1331	1220	980	994	650
Female	30	45	18	20	15
Unknown	4	0	0	0	0
Ethnicity					
White	284	305	202	232	148
Black	157	109	84	95	44
Hispanic	863	798	673	624	427
Southeast Asian	1	2	1	1	0
Other Asian	10	17	13	22	12
Other/Unknown	50	34	25	40	34
Age					
Under 1 year	0	0	0	0	0
1-4	0	0	0	0	0
5-9	0	0	0	0	1
10-14	3	1	2	0	0
15-19	103	83	55	53	36
20-24	362	285	204	204	121
25-34	599	538	461	427	289
35-44	231	273	207	230	147
45-54	52	56	57	76	54
55-64	11	23	11	14	10
65 & over	2	5	1	9	5 2
Unknown	2	1	0	1	2



# ■ Pelvic Inflammatory Disease

 Rate per 100,000 population:
 1997
 1998

 Orange County
 2.3
 2.1

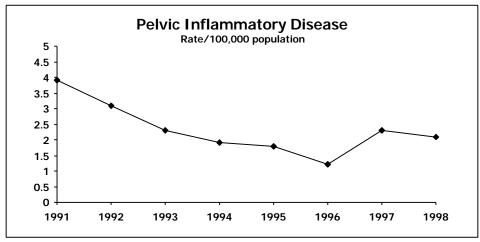
 California
 4.0
 4.8

 United States
 NN
 NN

#### Year 2000 Objective

- Pelvic inflammatory disease (PID)
   comprises a spectrum of inflammatory
   disorders of the upper female genital
   tract.
- Sexually transmitted organisms, especially Neisseria gonorrheae and Chlamydia trachomatis, are implicated in most cases, although even microorganisms that are part of the normal vaginal flora can cause PID.
- Underreporting is common because acute PID is difficult to diagnose, and no single historical, physical, or laboratory finding is both sensitive and specific.

Orange County	1994	1995	1996	1997	1998
Total Cases	48	48	32	62	59
Gender					
Male	0	0	0	0	0
Female	43	41	32	62	58
Unknown	5	7	0	0	1
Ethnicity					
White	12	9	10	10	12
Black	4	4	1	2	0
Hispanic	23	29	18	46	43
Southeast Asian	1	3	0	0	0
Other Asian	1	0	2	0	0
Other/Unknown	7	3	1	4	4
Age					
Under 1 year	0	0	0	0	0
1-4	0	0	0	0	0
5-9	0	0	0	0	0
10-14	1	0	0	0	0
15-19	11	12	2	12	2
20-24	17	17	5	13	11
25-34	10	13	17	23	28
35-44	7	3	7	13	15
45-54	1	1	0	1	2
55-64	0	2	1	0	1
65 & over	0	0	0	0	0
Unknown	1	0	0	0	0



### **■** Pertussis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.4
 0.5

 California
 1.5
 3.2

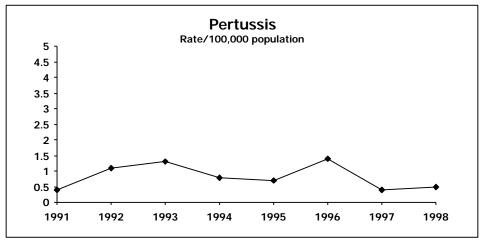
United States 2.5 (6,564 cases) 2.7 (7,405 cases)

#### Year 2000 Objective

- Pertussis (whooping cough) is caused by the bacterium *Bordetella pertussis*. It is transmitted by the respiratory route.
- A vaccine for pertussis has been available in the United States since the mid-1940s. In 1991, an acellular pertussis vaccine was licensed for the 4th and 5th doses of the vaccine series and in 1996 for the entire schedule. The acellular vaccines cause fewer serious side effects than the whole cell vaccines.
- Protection from vaccination lasts for 5-10 years. Recent studies suggest that pertussis is a common cause of cough illness lasting >7 days in adolescents and adults.
- Pertussis increased in the U.S. in the 1990s after reaching historic lows in the 1980s.

<1,000 U.S. cases annually

Orange County	1994	1995	1996	1997	1998
Total Cases	20	17	37	12	13
Gender					
Male	10	9	16	3	6
Female	10	8	21	9	7
Unknown	0	0	0	0	0
Ethnicity					
White	1	5	10	8	5
Black	1	0	1	0	0
Hispanic	6	7	22	2	8
Southeast Asian	0	0	0	0	0
Other Asian	0	0	3	0	0
Other/Unknown	12	5	1	2	0
Age					
Under 1 year	13	13	34	11	10
1-4	7	3	3	1	1
5-9	0	1	0	0	1
10-14	0	0	0	0	0
15-19	0	0	0	0	0
20-24	0	0	0	0	0
25-34	0	0	0	0	0
35-44	0	0	0	0	0
45-54	0	0	0	0	1
55-64	0	0	0	0	0
65 & over	0	0	0	0	0
Unknown	0	0	0	0	0



### Salmonellosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 20.4
 12.1

 California
 18.0
 14.1

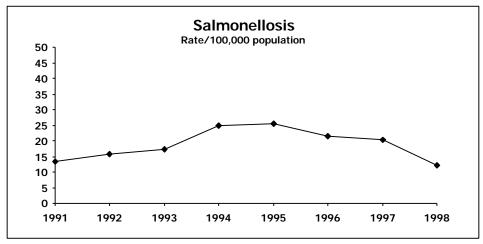
 United States
 15.7
 16.2

#### Year 2000 Objective

- The salmonellosis rate in Orange County increased 44% from 1993 to 1994, peaking in 1995 at 25.4/100,000. Increases in Salmonella serotype Enteritidis (SE) accounted for all the increase during this time, soaring from 12% of cases in 1993 to 51% in 1995, and displacing Typhimurium as the leading serotype. Both the total number of reported Salmonella cases and the percent due to SE have declined since 1995. In 1998, SE accounted for 39% of cases.
- Most SE cases are sporadic. Associations with eating eggs in any form and eating in food establishments (where eggs may be pooled) have been documented.
- In 1997, a large outbreak of SE occurred at an Orange County festival with 78 laboratory-confirmed cases. An eggcontaining dish was implicated as the vehicle.
- In recent years, sprouts have been the vehicle in multiple, multi-state outbreaks of a variety of Salmonella serotypes.

#### 16.0/100,000

Orange County	1994	1995	1996	1997	1998
Total Cases	637	665	568	551	334
Gender	007	000	000	001	001
Male	321	302	264	259	162
Female	316	363	304	292	172
Unknown	0	0	0	0	0
Ethnicity					
White	356	334	291	252	176
Black	7	11	5	6	2
Hispanic	161	216	183	125	96
Southeast Asian	17	23	21	17	18
Other Asian	29	28	21	63	24
Other/Unknown	67	53	47	88	18
Age					
Under 1 year	53	57	45	36	25
1-4	85	116	88	87	53
5-9	48	80	57	56	40
10-14	31	33	23	22	14
15-19	31	30	27	23	16
20-24	45	39	29	31	14
25-34	103	89	93	75	44
35-44	101	86	69	62	31
45-54	55	58	47	53	37
55-64	24	23	41	35	21
65 & over	61	54	49	71	39
Unknown	0	0	0	0	0



## Shigellosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 7.8
 7.3

 California
 9.8
 9.1

 United States
 8.6
 8.7

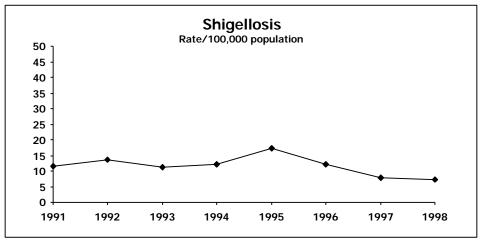
#### Year 2000 Objective

 The species of Shigella isolated in 1998 were as follows:

<u>Species</u>	Number	Percent
S. sonnei	133	65.8
S. flexneri	61	30.2
S. boydii	5	2.5
S. dysenteriae	2	1.0
Unknown	1	0.5

- Among the 186 cases in 1998 with symptom information, 98% had diarrhea, 50% had vomiting, and 45% had bloody diarrhea.
- 28% of cases (54 of 193 with information) were hospitalized.
- Public Health cleared 114 contacts of 48 cases in the course of case investigations.

Orange County	1994	1995	1996	1997	1998
Total Cases	312	455	321	212	202
Gender					
Male	147	220	146	104	96
Female	165	235	175	108	106
Unknown	0	0	0	0	0
Ethnicity					
White	110	98	106	51	56
Black	2	2	1	0	0
Hispanic	185	327	194	139	135
Southeast Asian	0	1	0	1	3
Other Asian	3	7	3	5	
Other/Unknown	12	20	17	16	6
Age					
Under 1 year	6	8	5	3	2
1-4	115	191	113	73	65
5-9	47	79	59	42	41
10-14	16	14	9	9	15
15-19	6	10	9	3	4
20-24	10	20	8	6	10
25-34	47	65	44	34	13
35-44	28	35	37	15	24
45-54	22	17	17	14	13
55-64	10	7	10	6	7
65 & over	5	9	9	7	8
Unknown	0	0	1	0	0



# ■ Streptococcal Infection (IGAS\*)

 Rate per 100,000 population:
 1997
 1998

 Orange County
 2.3
 2.3

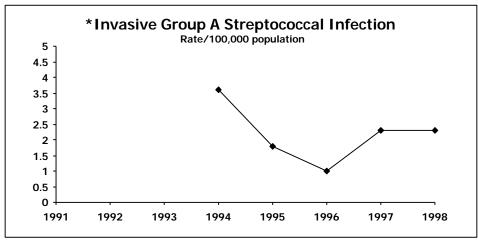
 California
 0.3
 0.3

 United States
 NN
 NN

#### Year 2000 Objective

- In a 2 week period in the spring of 1994, 2 Orange County children died of invasive group A streptococcal (IGAS) infection following chickenpox. A third child with chickenpox and probable IGAS infection died during this same time period. At that time, Orange County Public Health instituted reporting of all IGAS infections. Because of publicity and case-finding efforts, the 92 cases reported in 1994 probably represent more complete reporting than in subsequent years, although prevalence of more virulent strains of GAS could have played a role.
- A case-control study of IGAS following chickenpox with Los Angeles County and the California Department of Health Services found that temperature above 38.9°C (102°F) 3 or more days after onset of chickenpox lesions and any localized redness or swelling or complaint of pain should prompt parents to seek medical care.

Orange County	1994	1995	1996	1997	1998
Total Cases	92	46	26	62	63
Gender					
Male	44	28	13	44	35
Female	48	18	13	18	28
Unknown	0	0	0	0	0
Ethnicity					
White	51	31	6	34	39
Black	3	1	0	0	0
Hispanic	32	11	14	21	17
Southeast Asian	0	0	0	0	0
Other Asian	3	1	2	0	1
Other/Unknown	3	2	4	7	6
Age					
Under 1 year	5	2	0	1	2
1-4	32	2	9	12	6
5-9	15	1	1	9	9
10-14	2	1	2	2	4
15-19	1	2	0	2	2 3 5
20-24	4	2	0	2	3
25-34	9	7	3	1	5
35-44	9	11	4	15	5
45-54	5	9	3	5	8
55-64	5	4	3	4	7
65 & over	5	5	1	9	12
Unknown	0	0	0	0	0



# ■ Syphilis, Early

Rate per 100,000 population: 1997
Orange County 0.7
California 4.2
United States 9.4

#### Year 2000 Objective

- Early syphilis includes primary, secondary and early latent stages of infection, essentially all syphilis with duration of less than 1 year.
- Early syphilis reached an all time low in 1997, then increased in 1998.
- Of the 35 cases of early syphilis
  reported in 1998, 24 (69%) were
  primary or secondary cases. This is a
  rate of 0.9 per 100,000 population.
  The 1998 United States rate for primary
  and secondary syphilis was 2.6 per
  100,000. The national goal for syphilis
  elimination is to reduce primary and
  secondary syphilis to a rate of 0.4 per
  100,000.

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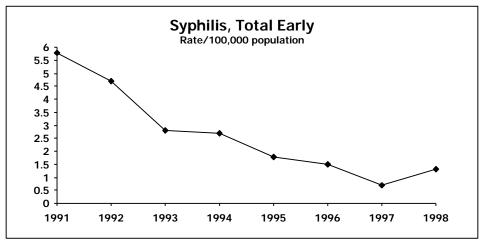
Orange County	1994	1995	1996	1997	
Total Cases	69	48	41	18	35
Gender					
Male	31	26	26	14	25
Female	38	22	15	4	10
Unknown	0	0	0	0	0
Ethnicity					
White	20	11	11	2	3
Black	15	3	8	6	3 5
Hispanic	30	32	21	10	27
Southeast Asian	0	0	0	0	0
Other Asian	4	0	1	0	0
Other/Unknown	0	2	0	0	0
Age					
Under 1 year	0	0	0	0	0
1-4	0	0	0	0	0
5-9	0	0	0	0	0
10-14	2	0	0	0	0
15-19	6	2	5	3	<u>2</u> 9
20-24	21	3	8	1	9
25-34	24	28	17	5	12
35-44	13	13	8	7	7
45-54	3	2	2	2	3 2
55-64	0	0	1	0	2
65 & over	0	0	0	0	0
Unknown	0	0	0	0	0

1998

1.3

3.0

7.3



# ■ Syphilis, Total, All Stages

 Rate per 100,000 population:
 1997
 1998

 Orange County
 7.3
 6.4

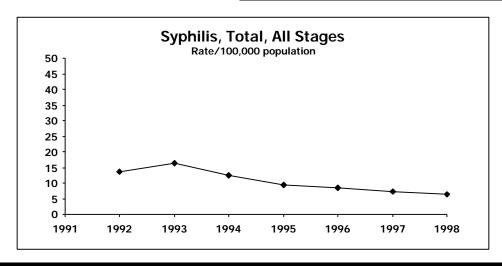
 California
 11.9
 8.1

 United States
 17.4
 14.2

#### Year 2000 Objective

- Total syphilis includes the following categories: congenital (including presumptive cases), primary, secondary, early latent, late, late latent, and other.
- The most recent peak in total syphilis in Orange County occurred in 1988, at a rate of 55 per 100,000. Since that time there has been a steady decrease in syphilis to the current historically low levels.
- Syphilis elimination, defined as the absence of sustained transmission, is a national goal. A plan to eliminate syphilis from the United States is being developed by the Centers for Disease Control and Prevention (CDC).

Orange County	1994	1995	1996	1997	1998
Total Cases	317	242	226	198	178
Gender					
Male	146	119	122	93	82
Female	171	123	104	105	96
Unknown	0	0	0	0	0
Ethnicity					
White	49	33	25	15	11
Black	25	14	17	18	6
Hispanic	193	147	142	134	130
Southeast Asian	NA	NA	NA	NA	NA
Other Asian	44	36	30	22	18
Other/Unknown	6	12	12	9	13
Age					
Under 1 year	17	23	14	19	8
1-4	0	0	0	0	0
5-9	0	0	0	0	0
10-14	2	1	1	0	0
15-19	14	4	8	10	10
20-24	45	19	24	12	24
25-34	122	94	90	85	49
35-44	69	61	42	47	44
45-54	29	25	24	19	23
55-64	11	9	10	3	12
65 & over	8	6	13	3	8
Unknown	0	0	0	0	0



# ■ Typhoid Fever, Case

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.1
 0.3

 California
 0.3
 0.2

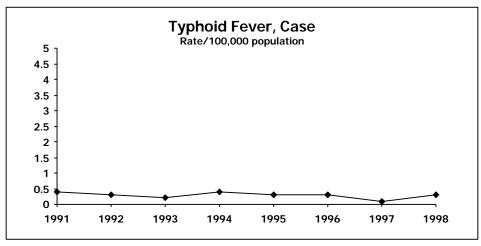
 United States
 0.1
 0.1

#### Year 2000 Objective

- Of the 8 cases of typhoid fever reported in 1998, 7 had traveled or been a resident outside the U.S. during their exposure period. The countries involved were:
  - ➤ Mexico--3
  - Pakistan--3\*
  - ➤ Bangladesh--1
- \*One of the 8 cases was found when household members of a case were tested, routine procedure in the investigation of typhoid cases.
- No source of infection was found for the case who did not travel outside the U.S.
- All 8 cases cleared their infection.
- As of 12/31/98, 6 persons remained on the Orange County typhoid carrier registry.

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Orange County	1994	1995	1996	1997	1998
Total Cases	10	7	9	4	8
Gender					
Male	4	4	6	3	2
Female	6	3	3	1	6
Unknown	0	0	0	0	0
Ethnicity					
White	0	0	2	0	0
Black	0	0	0	0	0
Hispanic	5	3	2	2	2
Southeast Asian	2	0	0	0	1
Other Asian	3	3	5	1	4
Other/Unknown	0	1	0	1	1
Age					
Under 1 year	0	0	0	0	0
1-4	4	3	1	1	0
5-9	0	0	2	0	2
10-14	1	1	2	1	0
15-19	0	0	1	1	4
20-24	1	1	0	0	1
25-34	4	2	1	1	1
35-44	0	0	1	0	0
45-54	0	0	1	0	0
55-64	0	0	0	0	0
65 & over	0	0	0	0	0
Unknown	0	0	0	0	0



### ■ Tuberculosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 12.2
 10.8

 California
 11.8
 11.7

 United States
 7.4
 6.8

#### Year 2000 Objective

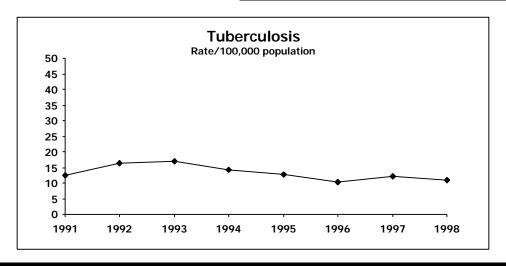
- Orange County reported 298 cases of tuberculosis (TB) in 1998, 10% fewer than in 1997. A significant delay in case reporting in 1996 resulted in the artificially steep decline in cases reported that year followed by an increase in 1997.
- Seven Orange County cities had a 1998 TB case rate higher than 15.0/100,000: Garden Grove (33.7), Westminster (25.9), La Palma (18.8), Santa Ana (18.3), Fountain Valley (18.0), Buena Park (16.1), and Anaheim (15.9).
- As shown below, Orange County 1998 TB case rates per 100,000 exhibit significant variation by ethnicity:

Southeast Asian 88.5 Other Asian 28.3 Latino 13.4 African-American 2.2 Non-Hispanic White 1.7

 87% of all TB cases in Orange County in 1997 were among the foreign-born; 33% from Vietnam, 26% from Mexico, 10% from the Philippines and 6% from Korea. Only 42% of 1998 U.S cases were foreign-born.

#### 3.5/100,000

Orange County	1994	1995	1996	1997	1998
Total Cases	364	336	273	330	298
Gender					
Male	203	188	155	184	157
Female	161	148	118	146	141
Unknown	0	0	0	0	0
Ethnicity					
White	45	43	25	35	29
Black	4	6	5	1	0
Hispanic	124	98	71	101	104
Southeast Asian	134	128	109	127	98
Other Asian	56	61	62	66	67
Other/Unknown	1	0	1	0	0
Age					
Under 1 year	1	3	3	2	1
1-4	24	10	4	9	6
5-9	14	8	0	3	1
10-14	6	3	3	3	5
15-19	16	10	10	10	8
20-24	41	32	23	36	21
25-34	63	66	60	62	64
35-44	63	53	51	61	51
45-54	38	43	35	45	40
55-64	39	38	30	39	30
65 & over	59	70	54	60	71
Unknown	0	0	0	0	0



### Yersiniosis

 Rate per 100,000 population:
 1997
 1998

 Orange County
 0.2
 0.4

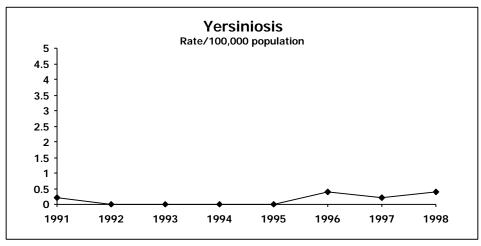
 California
 0.3
 0.4

 United States
 NN
 NN

#### Year 2000 Objective

- Individual yersiniosis cases are not investigated by Orange County Public Health.
- There are 2 *Yersinia* species that are pathogenic for humans, *Y. enterocolitica* and *Y. pseudotuberculosis*. Bloody diarrhea occurs in 10-30% of children infected with *Y. enterocolitica*. Joint pain occurs in about half of infected adults. Illness can also mimic acute appendicitis.
- Pigs are the main reservoir for
   Y. enterocolitica. Some human cases
   have been associated with disease in
   pets, especially sick kittens and puppies.
- Of the 11 cases reported in 1998, 10
  had infection with Y. enterocolitica and 1
  did not have the species noted.

Orange County	1994	1995	1996	1997	1998
Total Cases	NA	NA	10	5	11
Gender					
Male			7	2	6
Female			3	3	5
Unknown			0	0	0
Ethnicity					
White			4	1	1
Black			0	0	0
Hispanic			2	2	2
Southeast Asian			0	0	0
Other Asian			0	0	0
Other/Unknown			4	2	8
Age					
Under 1 year			0	1	0
1-4			4	1	2
5-9			1	0	0
10-14			0	0	1
15-19			0	0	0
20-24			0	0	3 2
25-34			1	2	2
35-44			2	1	0
45-54			1	0	1
55-64			1	0	1
65 & over			0	0	1
Unknown			0	0	0



## COUNTY OF ORANGE, CA · HEALTH CARE AGENCY · PUBLIC HEALTH CONFIDENTIAL MORBIDITY REPORT

NOTE: For STD, Hepatitis, or TB, complete appropriate section below.

DISEASE BEING REPORTED: If applicable, specimen date	MONTH	DAY Y	Source:
Patient's Last Name  Social Security Number  First Name and Middle Name  Birth Date  MONTH DAY YEAR  Address: Number, Street	ot./Unit Nu	Age	Ethnicity (√ one)  ☐ Hispanic/Latino ☐ Non-Hispanic / Non-Latino  Race (√ one) ☐ African-American/Black ☐ Asian/Pacific Islander (√ one)
City/Town  State Zip Code  Area Code Home Telephone  Gender Pregnant? Estimal  M F Y N UNK  MONTH  Area Code Work Telephone  Patient's Occupation/Setting  Pood service Day care Correctional facili  Health care School Other:	I DAY	ery Date	Asian-Indian
DATE OF ONSET    MONTH DAY YEAR   Reporting Health Care Provider		Orange Fax: Mail:	REPORT TO:  County Public Health  (714) 834-8196  P.O. Box 6128  Santa Ana, CA 92706-0128  (714) 834-8180
SEXUALLY TRANSMITTED DISEASES (STD)  Syphilis  Primary (lesion present)  Late latent > 1 year  Secondary  Late (tertiary)  FTA/MHA:  Pos Neg  Latent (unknown duration)  Neurosyphilis  Chlamydia  Urethral/Cervical  PID  Submitted  MONTH DAY  Submitted  S		HEPATITIS ep A ep B I Acute I Chronic ep C I Acute I Chronic ep D I Chronic	Please send copies of the hepatitis serologies (required for diagnosis) and liver enzymes (if done).
Other:  STD TREATMENT INFORMATION  Treated (Drugs, Dosage, Route) Date Treatment Initiated  Will treat  Unable to contact patient Refused treatment Referred to:	Suspe	cted Exposu	ion 🗖 Other needle exposure
TUBERCULOSIS (TB) Status  Active Disease Confirmed Suspected  Date Performed MONTH DAY YEAR  Date Specimen Collected MONTH DAY YEAR		Current T	NT INFORMATION reatment RIF PZA Other:
□ Infected, No Disease □ Converter □ Reactor  Chest X-ray  Date Performed □ Pending Not done Chest X-ray □ Pulmonary □ Extra-Pulmonary □ Both □ Cavitary □ Abnormal/Noncavitary  Source: Smear: □ Pos □ Neg □ Pending □ Not of Culture: □ Pos □ Neg □	done Ir		MONTH DAY YEAR  deat le to contact patient sed treatment

Please report the following diseases/conditions, including probable cases, to Communicable Disease Control and Epidemiology (CDCE) using the specified method and time frame.

> CDCE P.O. Box 6128, Santa Ana, CA 92706-0128 Telephone: (714) 834-8180, Fax: (714) 834-8196

If a report is urgent and it is a holiday, weekend, or after regular work hours, please contact the public health official on call.

- **REPORT IMMEDIATELY** by telephone to CDCE.
- Report within ONE WORKING DAY of identification by telephone, fax, or mail to CDCE.
- ② Report within **7 CALENDAR DAYS** of identification by telephone, fax, or mail to CDCE.
- ★ When two (2) or more cases or suspected cases of foodborne illness from separate households are suspected to have the same source of illness, please **REPORT IMMEDIATELY** by telephone to CDCE.
- AIDS [Please call, DO NOT FAX REPORT.]
- Amebiasis
- **Anisakiasis**
- Anthrax
- **Babesiosis**
- Botulism (infant, foodborne, wound)
- Brucellosis
- Campylobacteriosis
- Chancroid
- Chlamydial infections
- Cholera
- Ciguatera Fish Poisoning
- Coccidioidomycosis
- Colorado Tick Fever
- Conjunctivitis, acute infections of the newborn—please specify etiology
- Cryptosporidiosis
- Cysticercosis
- Dengue
- Diarrhea of newborn, outbreaks
- Domoic Acid Poisoning (Amnesic Shellfish Poisoning) Echinococcosis (Hydatid Disease)
- **Erlichiosis**
- Encephalitis—please specify etiology *Escherichia coli* 0157:H7 infection
- Foodborne disease
- Giardiasis
- Gonococcal infections
- Haemophilus influenzae, invasive disease
- Hantavirus infections
- Hemolytic Uremic Syndrome
- 0 Hepatitis A
- Hepatitis B (specify acute case or chronic) Hepatitis C (specify acute case or chronic) Hepatitis D (Delta)

- Hepatitis, other, acute
- HIV (Must have patient's consent. Please call, DO NOT FAX
- Kawasaki Syndrome (Mucocutaneous Lymph Node Syndrome)
- Legionellosis
- Leprosy (Hansen's Disease)
- Leptospirosis
- Listeriosis
- 7 Lyme Disease
- Lymphocytic Choriomeningitis

- Malaria
- Measles (Rubeola)
- Meningitis—please specify etiology
- Meningococcal infections
- Mumps
- Non-Gonococcal Urethritis (excluding lab confirmed Chlamydial infections)
- Outbreaks
- Paralytic Shellfish Poisoning
- Pelvic Inflammatory Disease (PID)
- Pertussis (Whooping Cough)
- **A** Plague, human or animal
- 0 Poliomyelitis, paralytic
- 0 Psittacósis
- 0 Q Fever
- **7** Rabies, human or animal
- 0 Relapsing Fever
- Reye Syndrome 7
- 7 Rheumatic Fever, acute
- 7 Rocky Mountain Spotted Fever
- 7 Rubella (German Measles)
- 7 Rubella Syndrome, congenital
- Salmonellosis (other than Typhoid Fever) 0
- **A** Scombroid Fish Poisoning
- Shigellosis Streptococcal infections (invasive disease caused by group A streptococcus; outbreaks of any type; individual cases in food handlers and dairy workers only)
- Swimmer's Itch (Śchistosomal Dermatitis)
- 0 **Syphilis**
- 7 Taeniasis (request of health officer)
- 7 Tetanus
- 7 Toxic Shock Syndrome
- 7 Toxoplasmosis
- 0 **Trichinosis**
- 0 Tuberculosis (including suspected cases)
- Tularemia
- Typhoid Fever, cases and carriers
- 7 Typhus Fever
- Unusual diseases
- Vibrio infections
- Viral Hemorrhagic Fevers (e.g., Crimean-Congo, Ebola, Lassa, and Marburg viruses)
- Water-associated disease
- Yellow Fever
- Yersiniosis

Noncommunicable Diseases/Conditions reportable to CDCE (Title 17, Section 2500): Alzheimer's Disease and related conditions; disorders characterized by lapses of consciousness. Cancer [except (1) basal and squamous skin cancer unless occurring on genitalia, and (2) carcinoma in-situ and CIN III of the cervix] is reportable to the local cancer registry [CSPOC—(949) 824-7416].